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INTERNATIONAL

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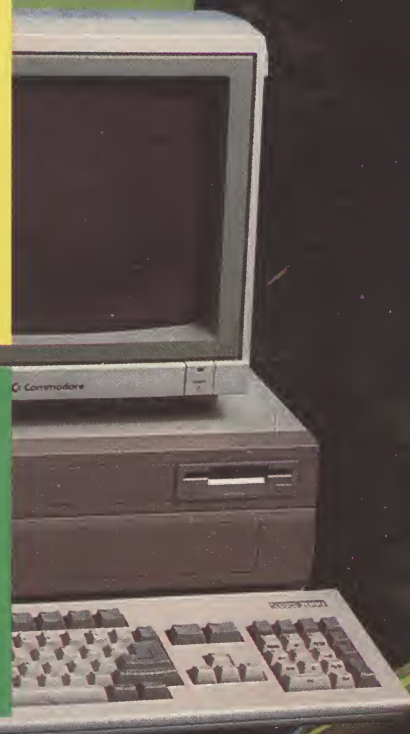
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SPECIAL

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JULY 1989

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MPS 1200P

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MPS 1500C COLOUR PRINTER

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CHARACTER SET ASCII characters and special characters.
MAX. PRINT LINE LENGTH 40 top 192 characters, according to print pitch selected.

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AMIGA USER

INTERNATIONAL

JULY 1989 Volume 3 Number 7

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AMIGA USER INTERNATIONAL

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THE AMIGA DIMENSION

In this issue of AUI, in addition to a major feature on word processing and DTP in which the Amiga is allowing us to become ever more professional, we have a fascinating look at a new technology - laser disks, or at least new to the Amiga dimension. Laser disk players have been around for some years but they found it hard to reach a market in competition with videorecorders. Now, linked to the Amiga, they are finding a renewed opportunity to join in a growing field: video facilities allied to easily accessible, huge memory storage.

This technology particularly interested me because just a few weeks ago I was shown, at the World of Commodore Show in Los Angeles, an authoring system that, being developed by Commodore in the U.S.A. also based on connecting the Amiga to a laser disk player.

The authoring system is being designed to allow the user to create, very simply, a video-based presentation incorporating already existing icons that are used to outline the order in which the elements, both from the Amiga and the laser disk player, will appear on the Amiga's screen.

Commodore is impressed by the video applications that the Amiga can achieve and, of course, the numbers of Amigas it may sell to people who want to employ those applica-

tions. Hence its support for the creation of the authoring system.

However, the most immediate uses of laser disk technology may well not be in business presentations but in more popular activities such as games; for it must be recognised that the largest number of Amigas bought is of the A500 and while they will certainly be made use of for all sorts of activities entertainment, especially games will probably be their principal function. (Ironically, Dragon's Lair, one of the most popular games now on the Amiga, first appeared on a laser disk!)

This month we have decided to acknowledge the increasing Amiga games dimension with a special section called Amiga Action. Linking the Amiga with the laser disk is another step toward making different fields of electronics coalesce and providing us with access through our favourite computer to highly sophisticated technologies that can enlarge our opportunities in all aspects of our lives from business presentations and DTP to home productivity and outstandingly exciting entertainment.

Antony H. Jacobson
Managing Editor and Publisher

Credit for the art on the May cover of AUI should have been given to Rick Unland, who did the artwork for the Byte by Byte product Sculpt 4D. Our apologies.

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Value for £ QUASAR

The reports are in: for every pound the UK computer industry spends on marketing it gets an average of £9.64 back in sales.

General wisdom has it that the more a company spends on marketing initiatives – promotion, advertising, direct mail or cold calling – the higher its revenues will be.

"The UK Computer Industry – Marketing Methods and their Effectiveness", from Alliance Marketing, indicates that the UK computer industry either gets things very right or very wrong. Few companies, whether they are software suppliers, training organisations or suppliers of media, are putting together an average marketing strategy.

E.A.S. Releases

ROLL OVER – an action game for one or two players. Players take the part of little computer men, that have to push stone blocks into holes of a playing field. Roll Over your enemies with your stone blocks and find your way past stone barriers. This graphic arcade-style game will have 50 levels and is available on Amiga and C64.

ANIMAL GAMES – Find your way through a variety of different events such as: Monkey climbing, Crocodile obstacle swimming, Elephant's coconut shooting and so on. Available on Amiga and C64.

HIGH STEEL

Screen 7 has announced the release of High Steel. This is no time to feel dizzy. As you balance precariously on a narrow steel girder, hundreds of feet above the hard concrete below, a head for heights is a must. There's a skyscraper to be built, and the Spitters, Crawlers and metal-munching Gremlins are in hot pursuit. You step over the slippery remains of your workmates' lunch, hurl your spanner at a menacing shadow,

"Welcome, Stranger from the Time to Come. My name is Melcior. You have been chosen to regain the stolen Eye of Quasar. In the Time that is Past our race ruled all things of Air, Fire and Soil. The great Lord Neptune held sway over all manner of Water and the creatures of the Oceans.

There came a time when my people polluted Neptune's Kingdom and consumed or destroyed all his creatures. In revenge Neptune created the Flood and stole our Talisman, the Eye of Quasar. He placed it in the care of the Guardians. Every thousand years, since that time, we send a Chosen One to attempt the recovery of the Talisman. It is foretold that when the Talisman is returned my people will once again multiply, and be mighty.

The way to the land of the Guardians is fraught with dan-



ger, but I can give you three Star Class 5 space ships. They are equipped with automatic ion shields and a built in Pulse Cannon. You may add to your weaponry by collecting star mines. Your journey will take you through five different sectors and you must navigate through meteor showers, sun corridors, underground cav-

erns as well as fight against the Creatures of Neptune and the allies of the Guardians. You can only defeat the Guardians by destroying their power globes.

Go with Glory Chosen One, from the Time that is to Come, and help my people prosper."

Quasar is available for the Amiga from White Panther Publishing. Price: £19.95.

"SEAL OF APPROVAL"

VIDION, The International Association of Video Game Players, has formed a review procedure complete with its own code of ethics and seal of approval.

"We want to give game manufacturers the means to assert the positive, and we want to reassure customers," says VIDION Executive Director David Rice. "We say, 'Look for this seal. It says the the game producer has the desire to do the right thing and is willing to undergo an ethical audit.'"

Applicants to VIDION must agree to abide by its code and

must also meet its "standards of acceptance."

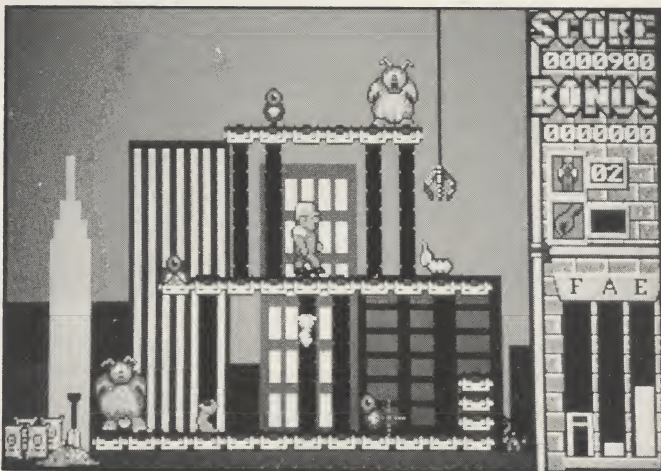
VIDION tells us the three primary objectives are: to give reputable video game marketers a positive way to affirm their commitment to good business ethics; to combat and counter-attack the smear campaign currently being waged against video games by over zealous groups; and to help identify - by conspicuous omission - companies that do not meet reasonable standards.

VIDION subscribers are charged \$500 a year and are susceptible to spot audits to ensure their compliance with

the code of ethics. Founded in 1983, VIDION has 19,000 video game playing members. Most are in the U.S., but there are also members in Japan, Canada, Europe and Australia.

SDI

"S.D.I." – the SEGA arcade conversion is now available for Amiga computer users. Your mission, as always, is to defend your country from imminent catastrophe. Using skill, judgement and razor sharp reactions, you must deploy your Strategic Defense Initiative and avoid global disaster. Price: £24.99 from Activision.



and curse the day you became a high steel worker.

The sixth floor is complete. The huge crane delivers the next girder, just as a brick smashes into your hard hat. Things might not be so bad if you could just find your sandwiches.

Can you overcome all obstacles and dangers confronting you to tower above the city streets below, or will you end up splatting the pavement like raspberry jam? Price: Amiga £19.99, Commodore 64/128 (cass) £9.99, £14.99 (disk).

MYTH

Magnetic Scrolls, authors of *The Pawn*, *The Guild of Thieves*, *Jinxter*, *Corruption* and *Fish!*, announce the imminent release of their first mini-adventure entitled *Myth*.

Myth has been specially written for members of *Official Secrets* who will receive the game as part of their £19.95 membership pack. Anita Sinclair explains "It's not the size that counts. To the inexperienced it will be more satisfying because they will be able to finish it without exhausting their patience. They will probably want to go on to something bigger. *Myth* will also be good for keen adventurers who may be able to romp through it with some friends in one evening."



MT230

Mannesmann Tally's MT230 family has 9-, 18-, and 24 pin models, all offered by Action in either b/w or colour versions at well below RRP. Prices range from the MT230/9 nine-pin b/w printer at £595.00 (£795.00 RRP) to the 24 pin MT230/24F colour printer at £795.00 (£1095.00 RRP). Plug-in interface modules cost £80.00 (pa-

STAR CUTS LC-10 PRICE AS UK PRODUCTION SHOOTS UP

Star Micronics U.K. Ltd, one of the country's top suppliers of computer printers, has announced a drop in price for its popular LC-10 dot-matrix machine. The company says the new price of £229 (down from £259) is largely due to the rapid increase in production at its Welsh manufacturing plant. Contact: Star Micronics UK Ltd., Craven House, 40 Uxbridge Road, Ealing, London W5 2BS. Tel: 01-840 1800



In Myth you take the role of Poseidon, the God of the Sea. Stripped of your Godly powers by Zeus you have to earn your right to eternal life and all other divine benefits by completing a test. Zeus has commanded you to steal Hades' Helmet which is secured in the depths of his subterranean Palace. To achieve this you will need to pay the Ferryman, cheat Death, and defeat Hydra, a nine headed monster guarding the Gates to the Underworld.

rallel), £85.00 (RS 232) and £115.00 (current loop).

All feature an advanced paper handling system which allows the operator to switch rapidly between push-tractor feed, pull-tractor feed and single-sheet friction feed without removing the continuous stationery.

Contact: Action Computer Supplies, Abercorn Commercial Centre, Manor Farm Road, Wembley, Middx, HA0 1WL. Tel: 0800 333 333.

MIDIMAN

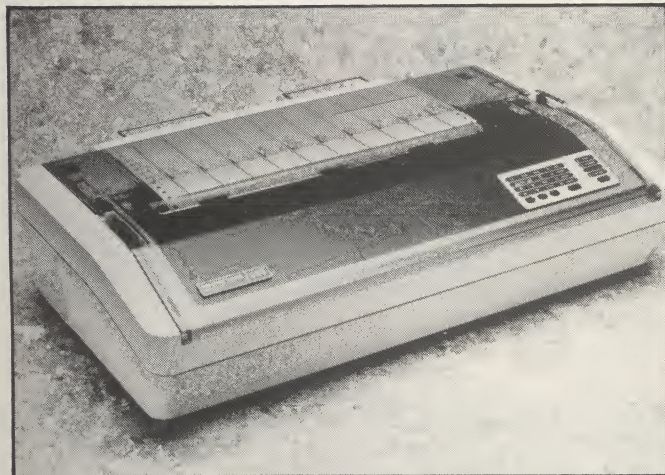
California based Musicsoft has announced the release of their newest MIDI hardware product, MIDIman, MIDI Tape Recorder Interface. MIDIMAN allows the novice user to record MIDI information directly to standard audio tape in real time.

The company claims MIDIMAN is an alternative to computer or hardware sequencers for recording and playing sequences in real time performance applications.

MIDIMAN acts as a virtual "player piano" in terms of its ability to record and playback these performances, patterns and songs in real time. The professional performing musician, of course, can now leave his computer at home by dumping all computer recorded sequences and songs to cassette for playback during performance via MIDIMAN and a simple cassette player.

Other MIDIMAN features include the ability to record MIDI timing information to tape thus allowing MIDIMAN to act as a "dumb" sync box for recording and syncing sequencers from a tape. Support of both normal and high bandwidth rate for use with DAT recorders and other high bandwidth tape decks is included, as well as aftertouch on/off modes for filtering extaneous aftertouch information. Tape duplicate mode can be selected for making backup tapes as well as channel select mode for either passive channelization over channels 1, 2 or 10. A special MIDI transmit priority allows the selective prioritization of data to channel 10 first and then to channel 1. MIDIMAN also transfers System Exclusive Data Dumps of up to 2000 bytes in length.

Price: \$199.95 (U.S.) Contact: Musicsoft, 30 North Raymond Suite 505, Pasadena, CA 91103. Tel: (818) 449-8838.



Rapid Release

Over the coming months, Rapid will be releasing a wide range of games and utility software for Amiga, and later PC software at £9.99 each.

The releases planned so far are:

Twylite (AMIGA): A fast action, solid 3D shoot-em-up.

Triton III (AMIGA): An impeccable shoot-em-up.

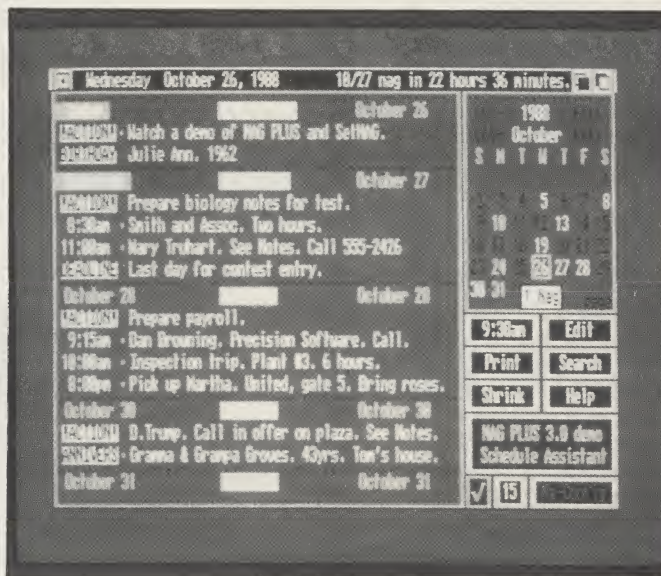
Metropolis (AMIGA): Equipped with fast, highly manoeuvrable craft you must search an enemy infested city for the vital clues that will allow you to escape.

Jeopardy (AMIGA): Enter a battle field and collect all armaments through over 100 screens. You control a battle tank which can be upgraded to provide extra fire-power such as rockets, lasers, etc.

NAG Plus

NAG PLUS 3.0 is a handy new schedule assistant with the unique ability to verbally remind you in advance of any regular or one-time event - up to 99 events per day - and then "NAG" you about it.

Gamma Software of Seattle says that NAG PLUS 3.0 is fully memory-resident, runs in the background with other Amiga software, and synthesizes sounds using the Amiga voice and sound hardware. One-time entry of events such as birthdays places them in the Perpetual Calendar. Events or appointments can then be edited up to two years in advance. Reminders are then presented in any form you choose: as a screen flash or computerised voice, or as any one of 24 fully adjustable (and programmable) bells and whistles.



NAG PLUS 3.0 will even dial the phone for you and put you in touch person to person. Just point and click to any number on your screen with over 6 digits, and NAG PLUS

3.0 will automatically dial your modem, wait until someone answers, then one click will turn your telephone back over to you for regular voice communication.

And, to keep you organised, NAG PLUS 3.0 has a report generating facility that will print out a list of each day's appointments (for more than one person, if necessary), or search the appointment database for individual appointment records containing specific key words.

Additional features include a text editor for generating phone call notes, memos or quick correspondence, an on-line help facility and an AREXX Port for initiating any timed event or action.

There's even a configuration program that allows complete customisation of NAG PLUS 3.0 - from installing your own text editor to setting the path of your autodialer.

Price: \$79.95 (US). Contact: Gamma Software, 17730 15th Avenue N.W., Suite 223, Seattle, WA 98155. Tel: (206) 363-6417.

DECnet

Synthesis of Wilmington, MA announces TSSnet for the Amiga, providing full access to DECnet networks for the Commodore Amiga.

Amiga computers running TSSnet become Phase IV end nodes in a DECnet network that can consist of over 64,000 different computers running a wide variety of operating systems. Synthesis TSSnet is a complete Amiga implementation of TSSnet, originally developed by Thursby Software Systems.

TSSnet will initially provide asynchronous DECnet communications, with a Network Control Program (NCP), Network Virtual Terminal support, and a programming interface at the Amiga device level. It will provide DECnet connectivity to users of X11 for the Amiga from GfxBase, an implementation of the X Window System for the Amiga.

Enhancements to the initial version will include Network File Copy and Listener, Electronic Mail for access to VMS Mail, and Ethernet support.

Contact: Synthesis, 20 West Street, Wilmington, MA 01887 (U.S.) Tel: (508) 657 5585.

Floppy-Disk Drive Shrinkage

Citizen Europe is claiming it has developed the world's smallest 3.5in floppy-disk drive.

The UO series, which comprises the UODC and UODD with access times of 3 and 6ms track respectively, measures in at 3 quarters of an inch thick and weighs 7 pounds. Previous 3.5in floppy-disk drives had been well over an inch in depth, Citizen said.

A spokesman said that Citizen had reduced the size of the floppy-disk drive by designing a side mounted head.

The carriage movement, head movement disk-chucking system and read/write mechanism are repositioned for space saving, the company claims.

Both models in the UO

family feature 1 Mbyte of unformatted storage capacity and are fully compatible with current 3.5in floppy drives with 26-pin interface/power cables.

They also feature low power consumption (1.8 watt in reading/0.025 in standby) and single power source operation.

Quote of Month

Dean Barret, marketing manager of Commodore UK on his response to the IBM price cuts: "If we can, and it looks like we should, then we might drop our prices. If there is the margin there, which there isn't at the moment, then we will."

What was that again, Dean?

"Smart" Card

Hospitals, GPs and Pharmacists in Devon are testing the use of "smart" cards for portable medical records. The cards look like conventional credit cards but contain their

own processor and memory.

Called "care cards", they contain a 16K chip embedded in a plastic card. So far 8,500 cards have been issued.

A-MAX

ReadySoft brings Macintosh compatibility to your Amiga with the introduction of A-Max. A-Max is a hardware and software combination that allows your Amiga to run most Macintosh productivity software. All you have to supply are Macintosh 64K (Mac) or 128K (Mac Plus) ROMs. Once the ROMs are installed, Macintosh software will run at full Mac speed on your Amiga.

The A-Max cartridge plugs into the Amiga's external disk drive port and has connectors for an Apple 800K external drive and additional Amiga drives. If an Apple external drive is not fitted, the included transfer software allows you to convert Mac disks to A-Max format which may then be used with standard Amiga drives.

A-Max is compatible with all Amigas and supports the Amiga's keyboard, mouse, disk drives, RAM expanders and parallel and serial ports (including Imagewriter emulation for Epson and compatible printers). HyperCard, Excel, Word, MacPaint, and MacTerminal are among the many compatible programs.

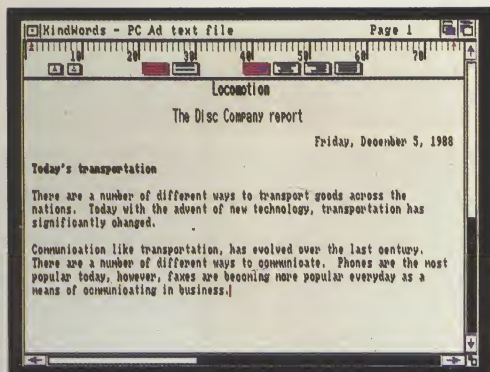
Price: \$199.95. Contact: ReadySoft, 30 Wertheim Court, Unit 2, Richmond Hill, Ontario, Canada L4B 1B9.

Their idea of DTP

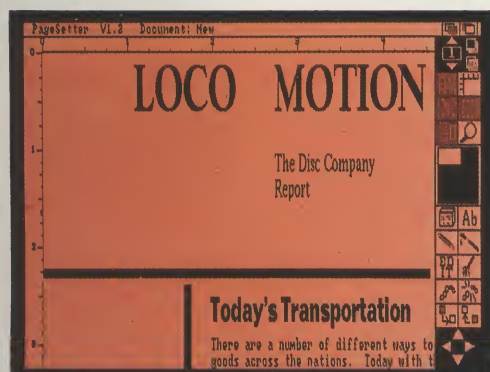


DTP that starts with layout

OURS



Enter your text in Kindwords



Lay out your page

When most DTP packages start and finish with page layout, Publisher's Choice comes as a refreshingly bright idea.

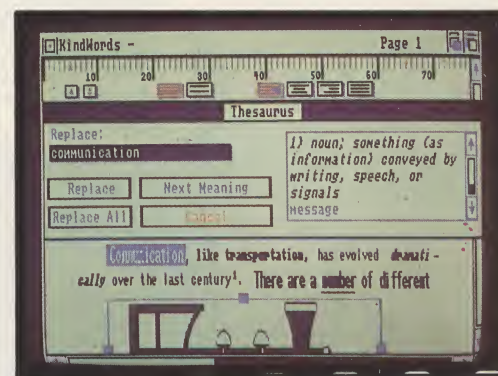
Publisher's Choice is a truly complete DTP system. In one package you get a word processor, a spell checker, a thesaurus, a page-layout program, a complete font directory and a clip-art library.

Every aspect of the DTP process is covered, there's nothing more to buy!

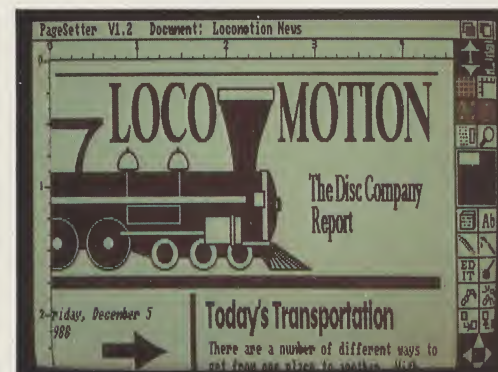
Publisher's Choice includes:

- Kindwords 2.0 – The leading word processors available for the Amiga.
- A 100,000 UK English dictionary spell checker
- A 470,000 word Thesaurus
- PageSetter 1.2 – A new version of this superb page layout program which takes text from Kindwords and produces spectacular documents incorporating text and graphics. It is compatible with any Amiga printer and offers Postscript output for professional quality text.
- Headlines – A stunning collection of over 35 hi-resolution fonts for text or headlines.
- Artist's Choice – why create your own image, it's probably already in amongst the 200 already stored on disc.

Individually these packages would cost hundreds of pounds – Publisher's Choice comes to you for **£99.95 inc VAT.**



Analyse text with spell checker and thesaurus



Create a polished, professional document

Publisher's Choice is available from The Disc Company: Paris 010 331 455 310 53;
SDL: London 01-300 3300; GEM: Harlow on 0279-412441;
HB-Marketing: West Drayton 0895-444433; Amiga Centre: Edinburgh 031-557 4242;
or Microdealer: Milton Keynes 0908-74000.

**The
DISC**
COMPANY

Licence to Kill

Bond - his bad side is a dangerous place to be...

007 is back and all set for a stint at cracking the criminal underworld in the thrilling computer version of the mega-movie, *Licence to Kill*.

Licence to Kill is the hardest hitting of all the 007 movies yet and the computer game reflects the thrills and spills of the film. Timothy Dalton portrays a new, tougher Bond on a personal vendetta against Sanchez. This, the latest Bond movie, pulls no punches as 007 fights his way through a series of hair raising stunts to destroy arch-drug smuggler Sanchez and the tentacles of his dealer network.

The plot of *Licence to Kill*, the computer game, closely follows that of the film. In the game you'll have full control of 007 in an exhilarating helicopter chase, a death defying underwater scene dodging sharks and Sanchez' thugs through to the gut-churning finale - a race to the border as Bond, in a stolen crop duster, attempts to prevent Sanchez escaping with a massive haul of drugs hidden in a convoy of petrol tankers.

You will be shaken (but not stirred) as the plot unfolds...

Licence to Kill will be available for the Amiga, IBM PC and Commodore 64.



Chip Photos

Toshiba, the electronics company, and Fuji Photo Film have made an agreement which should help take the electronic still camera into the consumer market.

The two Japanese companies have worked on a product, called the IC Card Camera, in which images are stored in a digital compressed

form in integrated-circuit memory chips rather than on the two-inch magnetic disk stores of current designs.

A main aim is a storage capacity comparable with conventional film cameras. It is hoped that the signals coming from the image sensor can be sufficiently compressed to record 50 frames on a 20 megabit card.

PHOBIA

TO SLEEP, PERCHANCE TO DREAM... but don't sleep too deeply 'cos all your nightmares are waiting for you in this unique arcade blast from Tony Crowther.

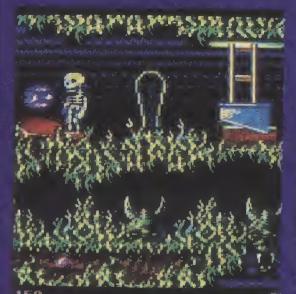
Phobia is set in the minds of men, feeding on every human fear; spiders, fire, death - and dentists!

Grab hold of your courage and prepare to face the frightening challenge of each of the 14 planets that Phobos have set against you. Can your body take the heat, can your brain take the pressure!

Available on: Amiga £24.99, Atari ST £24.99
Commodore 64 Tape £9.99 Disk £12.99



Commodore 64 screen shots



STEIGAR

Screen 7 has announced the release of Steigar. Marauder. Soldier of Fortune. Hit man. His business was death – other people's of course – and his currency was gold. If there was a problem – any problem – someone else's problem, Steigar would make it his problem – at a price. No island fortress was secure. No Embassy was safe. If the gold was right – the job got done.

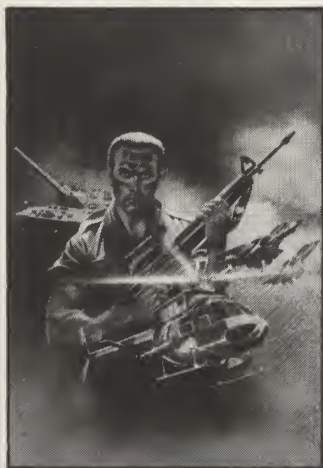
Where he came from, no one dared ask, but Steigar was bound for Hell. Then came capture. The interroga-



tion. "Too useful to erradicate" the CIA said.

Drafted into the US Navy, Steigar is trained to be a hit-and-run helicopter pilot. Only the Senior Command know that Steigar is no ordinary recruit.

It may be a terrorist training camp that needs wiping out. It may be a military dictator de-stabilising the area who needs attention. When the odds seem impossible, Steigar is let loose, dealing death and destruction to the chosen enemy. Price: Amiga £19.99. Commodore 64/128 (cass) £9.99, (disk) £14.99.



Of Music and Mice

Aesthetic Engineering is a new music software company formed by composer and software author Laurie Spiegel.

AE's initial product is "Music Mouse", formerly published by OpCode Systems, which is now available directly from Aesthetic Engineering for the Amiga.

An Amiga Music Mouse backup disk is now available

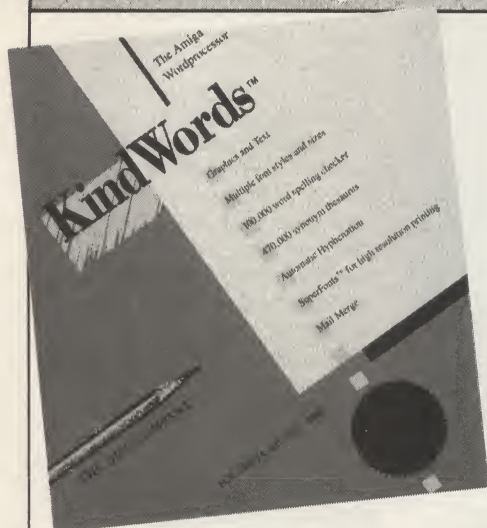
which contains Version 1.03. Updates since Version 1.00 have introduced the ability to handle European keyboard maps, fixed some minor menu bugs, and fixed a problem which prevented the proper running of Music Mouse with Mimetics' Soundscape. No other changes have been made. The Amiga Music Mouse 1.03 disk is available either as a backup or an update for \$8. You must be a registered user and include the Serial Number of your copy with your order.

The price for each Music Mouse - Amiga is now \$789.95 plus \$5 shipping and handling. MIDI Terminal 1.0 is available for \$25 from Aesthetic Engineering or through "Shareware" channels such as public domain libraries or on-line networks which have obtained the new version. MIDI Terminal 1.0 is also bundled with all copies and upgrades of Music Mouse.

Upgrades, technical support, and all other matters are handled by Aesthetic Engineering at 175 Duane Street, NYC, NY 10013 (U.S.) Tel: (212) 925-7049.

PHOBIA





and Artists' Choice, a disk containing more than 200 pieces of clip art.

All the software is unprotected so it can be backed up, or transferred to a hard disk. Included is a 214-page indexed manual that shows examples of the fonts, including another nine used by KindWords, and a print out of all the clip art. The programs will run on a 512K Amiga, although a machine with a megabyte is recommended to get the most from them.

Publishers' Choice is a bargain. Peter Lee recently hailed KindWords 2.0 as 'a mature and seasoned performer' (AUI February 1989), and I wrote of PageSetter that it was 'powerful and simple to use' (AUI, April 1987). Both programs can use all the bitmapped fonts and clip art inclu-

cludes basic drawing tools, and then transferred onto the page itself.

"Text is first loaded into a simple word processor, where it can be edited or altered, and then transferred to a box or boxes."

PageSetter lacks the sophisticated typographical control of the best desktop publishing programs. One result of its graphics handling is that illustrations can be no larger than a quarter of a page. Another is that it adds some nasty shading

Publishers' Choice

Is Publishers' Choice the ideal compilation for the would-be Fleet Street Editor?
John Walker reports

Newcomers to the Amiga do not know how lucky they are. Not only is there now an excellent range of useful software for their computer, but its cost is dropping all the time. Not so long ago Deluxe Print was imported into Britain at £90. Now it is virtually given away with Deluxe Paint II.

Even better, tried and tested programs are being turned into budget bundles. The Disk Company's Publishers' Choice, a desktop publishing package of five programs, costs less than the first release of one of its items, PageSetter 1.2, which is still one of the better desktop publishing programs – although that is as much a comment on the relative weakness of much of Amiga DTP programs as it is on its merits.

The bulky white box of Publishers' Choice also contains:

KindWords 2.0, a good WYSIWYG word processor that integrates text and graphics and includes a 100,000 word English spellchecker and a thesaurus; LaserScript, a PostScript driver for PageSetter, which enables you to output to a high quality laser printer or photo-typesetter; Headline Fontpack, which provides 14 medium-size bitmapped fonts;

ded, and text written with KindWords can be transferred to PageSetter. KindWords lacks some of the functions of high-end word processors. It has no indexing facilities and you can not have text in newspaper-style columns. But it lets you use any Amiga-compatible bitmapped fonts and comes equipped with its own serif and sans serif type faces as well as fonts for symbols, maths and Greek.

"The programs will run on a 512K Amiga, although a machine with a megabyte is recommended to get the most from them."

It can integrate text and colour graphics. Hard copy can be produced in two ways – either by using your printer's built-in typefaces or by printing a screen dump using KindWords' own printer drivers, which cover most popular dot-matrix machines and produce very good output.

PageSetter provides a desktop metaphor for typesetting and designing documents. You lay out your document on an art board, which shows one page at a time. This can be viewed in three magnifications, from the whole page in miniature to a close-up of part of it.

Text and graphics are contained in rectangles, known as boxes, on the page. Text is first loaded into a simple word processor, where it can be edited or altered, and then transferred to a box or boxes. In a similar fashion, graphics are first loaded into a simple art program, which

to graphics imported from the likes of Deluxe Paint when it converts them to monochrome images.

I am unsure that The Disc Company is entirely accurate in describing Publishers' Choice as an 'Integrated Desktop Publishing Solution'. There is not much interaction between the two programs. Take colour, for example. KindWords allows you to use graphics with up to 16 colours in a document. PageSetter has no colour facilities at all. And there is hyphenation (the correct breaking of words at the end of a line which is essential to create orderly justified text); KindWords has automatic hyphenation, but it is one of the weaknesses of PageSetter that it does not. When you transfer text from KindWords to PageSetter the hyphenation is lost. PageSetter only preserves text styles, such as bold, italic, or underlined when taking a file from a word processor. On addition, KindWords has a good spell-checker but, again, PageSetter has none. You can not use KindWords' spell-checker with PageSetter, which means that if you make changes to a document created with KindWords after importing it into PageSetter, you will need to reload it into KindWords to make sure that no spelling errors have crept in.

"PageSetter can also take text from most other word processors, including Scribble!, Textcraft and WordPerfect."

Finally, there is PostScript. You can not create a document in KindWords and then use LaserScript to print it on a PostScript-compatible laser printer. LaserScript only recognises documents created with PageSetter. So in order to get Post-

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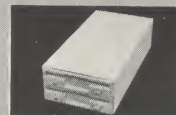
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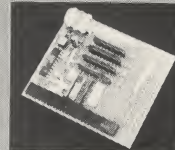


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* JUMPDISK * GENEALOGY * JUMPDISK * GENEALOGY * JUMPDISK *

Joining "PeopleTree" in this special show issue of JUMPDISK are – PointerEd: Make a special pointer and then use it in a program. ESP: Do you possess it? Enjoy the experiment. Virus3.2: Now it identifies all 16 known Viruses. Coderoom: Only you have the key to encode & decode your text files. BigPix: Scroll Multiple Art Screens endlessly. Plus more! In the Articles section we feature the latest Amiga news from the USA, Tutorials, Reviews of DPaint III and Microfiche Filer, the latest PD releases and much, much more. All for only £8.50 inc.

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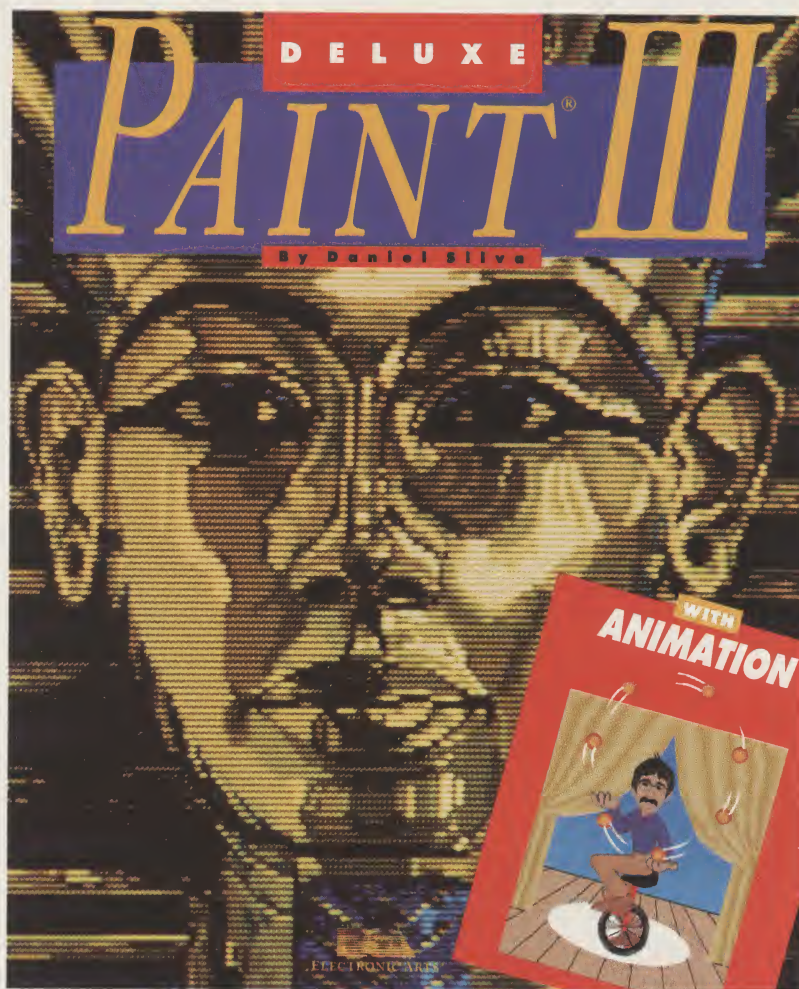
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DeluxePaint III makes animation easy. With the AnimPaint feature, you can create animation just by pressing one key to record your paint strokes, and another key to play them back. You can also use any multi-cell animation as a brush and paint with it, even in full 3-D.

8 New Paint Features

DeluxePaint III also adds sophisticated features to the number one Amiga paint software: Extra-halfbrite support for 64 colours; direct overscan painting for desktop video; wrap and tint brush modes for special effects; better font support; improved compression; and many performance enhancements, including faster perspective. Product requires 1MB of RAM.



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Send DeluxePaint II manual cover and £35 (£30 upgrade + £5 carriage) to
Electronic Arts Ltd., 11/49 Station Road, Langley SL3 8YN, England.
Allow 2-4 weeks delivery. DPaint I owners can upgrade for £55.



ELECTRONIC ARTS[®]

ProPage v1.2

Is Professional Page the premier DTP package? John Walker reports...

Gold Disk's Professional Page has established itself as the finest desktop publishing program for Amiga users with access to a PostScript-compatible laser printer. Now, with the latest 1.2 version, it may also be the best for the not-so-silent majority with dot-matrix or ink-jet machines.

Whether it can maintain it's top position depends on the final quality of SoftLogik's rival package PageStream, which was released and quickly withdrawn because it contained fatal bugs.

There are many other improvements to Professional Page 1.2 which are likely to continue to make it the program of choice for PostScript purposes. The most important is its compatibility with Gold Disk's new structured drawing program Professional Draw. Its position is also strengthened by the release of two other packages: Professional Page Templates, providing well-designed, ready-to-use layouts for newsletters and advertisements; and the first volume of Structured Clip Art, which contains a varied assortment of high resolution graphics.

But it is Professional Page's improved approach to dot-matrix or ink-jet printing that is likely to cause most interest. Hither-

to, although you could output pages from the program to any non-laser printer, the results were disappointing. The reason was that the only typefaces available were the screen representations of the program's PostScript fonts. On-screen many of them looked dreadful, but they printed

"You can make use of the Amiga's own collection of fonts - Diamond, Ruby, and so on - or import any other fonts, such as those supplied with KindWords or ProWrite, or ones contained in the many available font collections."

beautifully on a laser printer. On a dot-matrix printer, though, what you saw was what you: jagged headlines and virtually unreadable body type.

Professional Page has changed all that by allowing you to use any bitmapped fonts with the program. You can make use of the Amiga's own collection of fonts -

Diamond, Ruby, and so on - or import any other fonts, such as those supplied with KindWords or ProWrite, or ones contained in the many available font collections.

When used with the Amiga's 1.3 Workbench printer drivers, which include an option for smoothing away jaggies when printing bitmapped fonts, the results can look very good. The program also allows you to change the aspect ratio of the page to correct any distortion in the hard copy.

Professional Page handles graphics very well and, even with a dot matrix printer, can produce some good quality output. For those with colour printers, ink-jet ones especially, the final product can be dazzling, since the program supports graphics in HAM (Hold and Modify) mode with their 4,096 colours and can output text and structured drawings in up to 16 colours.

I wish, though, that Gold Disk had made it easier to install bitmapped fonts within Professional Page. To do so, you use a program, PPage.Any.Font, included on the Utilities disk. This will not work from the Workbench since it has no icon. Instead, you have to work from the CLI



The advantage of structured graphics is that an image can be printed at any size without loss of resolution., as is shown by this repeated image from Gold Disk's new clip art collection.

(Command Line Interface). You first need to transfer your fonts to the program's font directory, make an assignment to the directory, and then use Any.Font, which produces a metric file of the font so that Professional Page can use it.

Gold Disk's supplementary manual for the 1.2 version admits that novices may find this daunting. It suggests that, if you are worried, you should use a program such as CLImate, which makes the task easier. But it would have been better if Gold Disk had automated the procedure, as it did with its similar MakeFont program for creating new sizes of PostScript fonts.

This improvement to Professional Page only affects dot-matrix or ink-jet printer users. You cannot use bitmapped fonts directly and have them output to a PostScript printer, then you have to import them as graphics.

There are many other minor improvements to be found in Professional Page 1.2. It is faster, because you can intercept screen refreshes by hitting the ESC key. No longer is the size of bitmapped graphics limited to 1008 x 1008 pixels. The



program can handle virtually any size, memory permitting. And a new auto-scaling feature will fit the graphic as near as possible into the box you have drawn to contain it.

Most welcome to me (although the supplementary manual mentions only a few of them) was its increased number of equivalents for mouse-and-menu operations. You can now change type-styles directly from the keyboard. If you want italic type, for instance, you no longer need to go to the Type menu, find the Style sub-menu and highlight Italic. Instead, you can just press a function key, which saves a lot of time.

The size of a page you can create with the program has lengthened by 5 inches all round to 22 x 22 inches. The program will strip carriage returns from ASCII text when loading it, and is compatible with Gold Disk's new word processing program Transcript (also reviewed in this issue of AUI).

Menus have been rationalised as well. The requester that pops up when you want to load a document will now sort the

files on disk into alphabetical order. You no longer have to go to two or three different menus to set your printing preferences. Everything, including colour separations, can be done from one output requester.

Control over colour separations has been improved. You can specify the amount of yellow, magenta and cyan that is to be removed and added to black in four colour separations with the user-definable Under Colour Removal and Gray Component Removal options. The program, the very rich may like to know, now supports Colour PostScript printers.

Another addition is ability to output a Professional Page document in standard

means that you can transfer it to a desktop publishing program such as PageMaker running on a PC or a Macintosh. At the moment this is a one-way traffic: you can save files in EPS format but you cannot import them from other programs.

Templates and Design Guide

A useful adjunct to Professional Page, especially for novices, is the new Professional Page Templates and Design Guide. This contains a single, unprotected disk and a useful 48-page manual, both prepared by New York designer Jon Steele.

On the disk are 50 ready-to-use layouts for advertisements, newsletters, business cards, brochures, reports and envelopes. Most are based on just two typefaces, Times and Helvetica, and show

THIS IS A HEADLINE THAT SHOULD BE SET IN ALL CAPS

A big two-line Headline

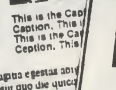
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NEWSLETTE BANNER

Publication tagline, Issue number, Date

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how many different-looking publications a professional can create while using the same basic tools.

The designs are all clean and attractive. "Classic" is the word used to describe them, which means that they are not

"The designs are all clean and attractive. "Classic" is the word used to describe them, which means that they are not adventurous or fashionable."

adventurous or fashionable. Only one template, for a cassette box insert, makes use of the advanced capabilities of laser printers for rotating, re-scaling or overprinting pages.

Jon Steele seems to dislike fully justified text. He avoids it in both his manual and his designs, and he makes no use of such typographical niceties as drop capi-

cont. on next page

continued from page 19



tals. But within these limitations, the results are stylish and provide an excellent basic course in graphic design for desktop publishing.

Occasionally, the template on disk and the corresponding illustrations of them in the manual do not match. One will show a headline in normal type, for example, while the other will have it in italics, but that is a minor matter easily overcome. All of the templates are ready to use. You can just pour your text into them and add a suitable graphic to provide a professional looking result.

The 1.2 version of Professional Page is described as "an interim release". The many typographical errors in the supple-



mentary manual suggest it was issued in a hurry, mainly to provide compatibility with Professional Draw, which considerably enhances Professional Page by adding the ability to rotate, reverse and otherwise distort text, and to create structured graphics more easily.

It can still be hard to draw with Professional Draw for its main tool, the Bezier curve, takes practice before it can be used

effectively. What the program really needs is an auto-trace facility such as is found in structured drawing packages like Corel-Draw for the IBM PC and Illustrator 2.0 for the Macintosh. With those programs, you import a bitmapped graphic and they automatically produce a high resolution outline tracing of it.



Clip Art

Gold Disk is partly making up for this deficiency by issuing ready-drawn structured clip art. The first volume contains 145 illustrations, ranging from signs and symbols to borders, banners, images of travel, sport, business and to special events such as Christmas and Valentine's Day.

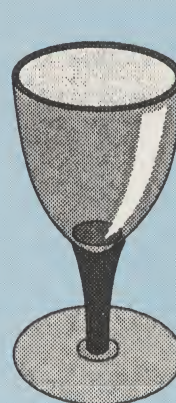
There are also maps of the world and Europe as well as some individual countries: Australia, Britain, Canada, Germany and USA, which provides an indication of where the Amiga sells best. Most of the graphics are in two or three colours and provide a useful basic set of illustrations to enliven a newsletter or two or to create signs and posters. I hope future volumes will provide some more detailed images than the ones currently on offer.

The advantage of structured over bitmapped graphics, of course, is that they can be reproduced at any size without the loss or resolution when used with a laser printer or image-setter. But Gold Disk has included a ClipMap utility to convert the graphics from structured to bitmapped form so that they can be used with any IFF-compatible graphics program, such as Deluxe Paint or MovieSetter. ClipMap, unlike PPage.Any.Font, is designed to be easy to use, allowing you to convert the graphics to high, medium or low resolution in any size you like.



Professional Page 1.2 is an essential upgrade to a steadily-improving DTP program that is capable of producing high-quality professional output. I hope its remaining deficiencies will be removed soon; these include the inability to preview more than one page at a time and its lack of style sheets, automatic page numbering, and fractional increments in type sizes.

Its usefulness has been greatly enhanced by the publication of Professional Draw and the accompanying clip art, and by the instant access to good design



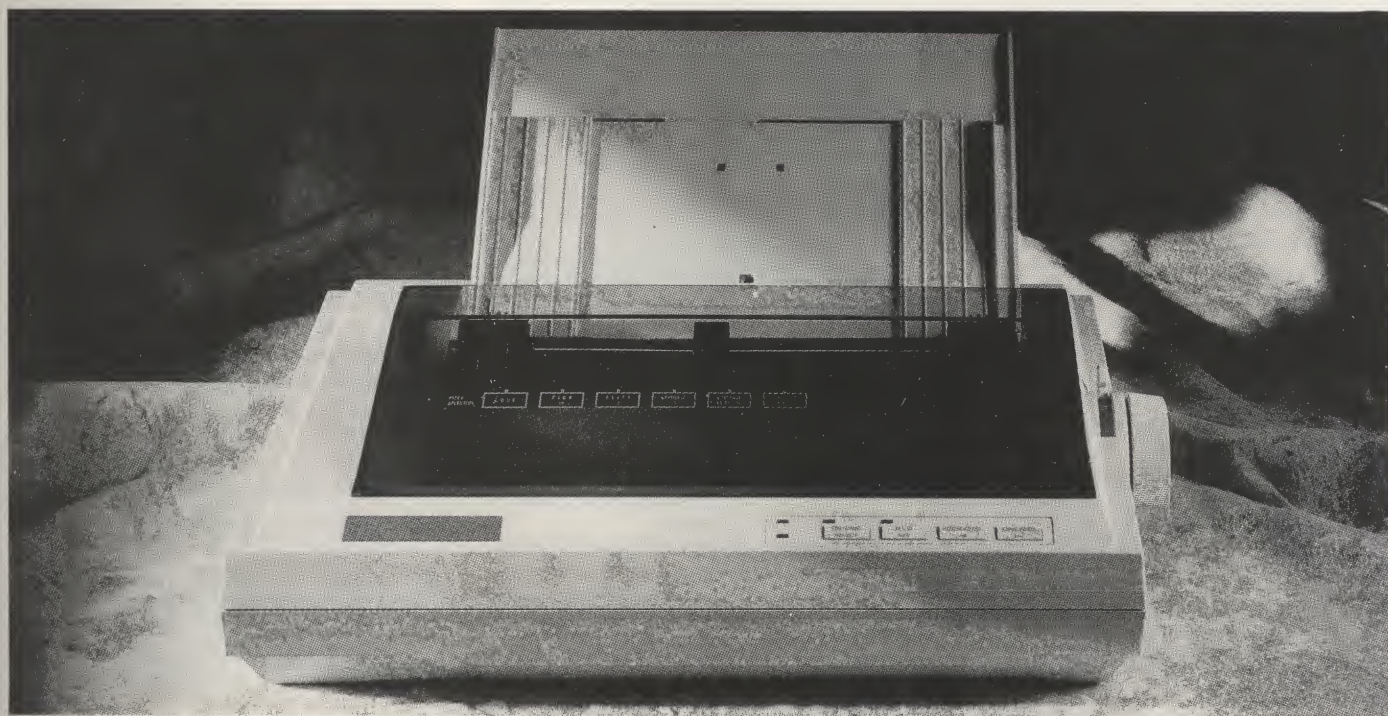
provided by Professional Page Templates. Desktop publishing on the Amiga gets better all the time.

J.W.

Price: £249.00; Templates and Design £44.95 (inc. VAT); Structured Clip Art £44.95 (inc. VAT). An upgrade policy for owners of Professional Page v1.1 will be announced shortly. Contact HB Marketing for details.



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The Works!

Platinum Edition

Peter Lee tries out a five-piece suite for size and finds it fit for anything...

Top software house MSS obviously know a good idea when they see one. Why else would they re-vamp their existing sturdy line of programs not once, but twice?

Initially there was Scribble!, a functional and well-tryed word processor; then came other programs such as Organise! the database, Online! the comms package and Analyse! the spreadsheet. These were later lumped together in a kind of 'greatest hits' volume called The Works!.

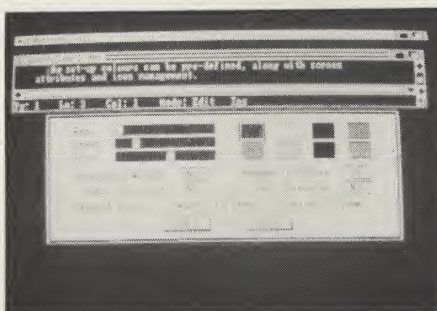
Now the package has been improved yet again, augmented and re-born as the Platinum Edition - a fully integrated, and very competent business suite of programs.

Three unprotected disks and a mammoth ring-bound manual make up the professional-looking package, which incorporates the following modules - Word processing, Telecommunications, Database, Spreadsheet and Sideways printing. Each portion is accessed via a common entry screen, and thanks to the multi-tasking Amiga, various applications are able to run simultaneously, and can be called from within each other. The AmigaDOS Clipboard device is used for the quick transfer of data from one program to another.

"Provided you have the memory, all the Works! needs to run is a minimum 512K Amiga. This is a very useful option to help speed up document checking."

Workbench 1.3, with all its enhancements, is shipped with this Edition - and that means you also get a very good selection of printer drivers.

A high degree of quality is evident throughout. MSS have thankfully retained the common-sense touches which made



the original software so accessible, and ultimately so popular.

Word Processor

Any Scribble! users will be right at home here. There are some major improvements, but fundamentally the program's control is much as before.

One very welcome feature is the ability to specify from the workbench whether or not you want the dictionary and thesaurus loaded into RAM. Provided you have the memory, all The Works! needs to run is a minimum 512K Amiga. This is a very useful option to help speed up document checking.

There are over 100,000 words in the dictionary, and you can add your own as you meet new ones. The nightmare method used in the earlier Scribble has thankfully been replaced by a very friendly and intuitive approach. Another novel feature is the option of being able to spell-check words as you type, a beep signifying an unfamiliar entry. This is a slightly mixed blessing, and one which I found hampered flow. Once again, it is a United States dictionary, so you will have to teach it to spell words like colour and organise.

The thesaurus is a major advance, containing 470,000 entries. By requesting information about a word under the cursor, information about its use and possible alternatives are displayed. In addition the program supports an 8 colour display (though fewer can be chosen to conserve memory), but although attractive, this is purely cosmetic.

Of more immediate use is the ability to print an IFF image at any point in the document; this is not like MSS's Excellence! program, you do not see the image on screen, only on the printout. It is nevertheless a sound attribute considering the emphasis there is these days in DTP.

However, it is far from friendly. You tell the program to print a graphic by using a dot Insert Picture command (.IP), which requires five arguments - the filename obviously, then the left margin, picture width, height and density.

All the usual word processing facilities are available, including mail-merge. The familiar Scribble! dot commands are retained to define most output features - from headers and footers to special printer control codes, and a full listing of commands is available at the press of a function key.

"If you have an autodial modem, then making a call is as simple as double clicking on an entry in your phonebook list."

Telecommunications Module

Baud rates from 300 to 19,200 are supported, and there are emulations for VT52, 100, 102 and Tektronics 4010 standards.

The program carries a phone book allowing up to 40 entries, and each can have a pre-determined script-file associated with it, together with a supplementary list of 20 Macrokey definitions. If you have an autodial modem, then making a call is as simple as double clicking on an entry.

Script files can be created which allow the automatic logging on and capture of data from the remote terminal - for instance a script could enter your name and ID, go to the mailbox, collect any outstanding messages, store them in the buffer then hang up.

Comms packages are very similar, and this program provides a thorough tool for accessing remote terminals via a modem. File transfer and protocols are handled

TEST DRIVE

well, aesthetically, with choice of colour and font, the program is friendly enough.

The script file facility is outstanding and extremely comprehensive; and I have used comms packages for the PC which cost more than this entire suite, and which are no more powerful in this aspect. Added to which the module also supports the Sadie protocol, which to put it simply lets you receive a file, transmit a file and chat over the keyboard with someone. The bad news is that as far as I know, this is currently supported only by this software, Online!Platinum and the same company's bulletin board software BBS-PC (v4.30). Let's hope it becomes something of a standard.

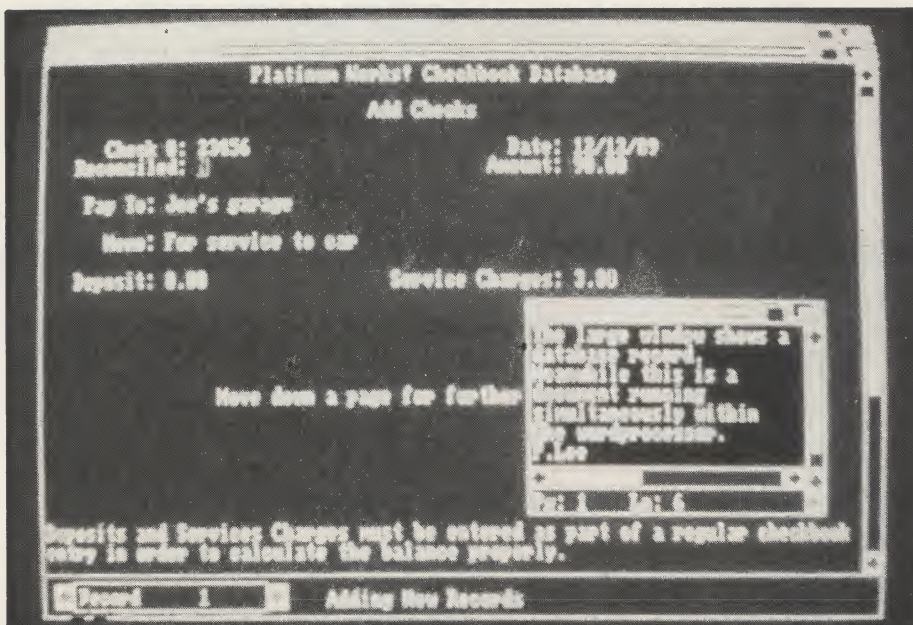
Spreadsheet Module

Claimed to be the fastest Amiga spreadsheet, this module boasts 68881 co-processor support, and the ability to import Lotus 1-2-3.wks files. Apart from having over 40 functions, the program can also display 8 graph types in up to 8 colours, giving an immediately more accessible evaluation of a situation than a column of figures ever could (to the non-accountants among us).

Up to four graphs, each with their own range of elements, can be displayed on screen at once, and can take the form of pie, bar, line, x-y, stack-bar, Z-pie (or 3D-pie), and 3d-bar. Legends and titles are user-definable, as are scaling parameters. And you can print out the results if needed.

As well as the familiar spreadsheet operations, this module supports a macro language aimed at helping users automate their procedures. A macro is simply a definition of a series of keystrokes or commands which can be replayed quickly and with a keypress.

As you become more proficient, the opportunity arises for customising your own menu structure, allowing complex



calculations to be chosen from a pre-defined list. So by calling the menu, you can have several options at your fingertip - interestingly enough, the chance to call up a sub-menu of different choices.

Sideways Printing Utility

While spreadsheet data would seem the obvious candidate for such a module, any IFF image can just as easily be dumped vertically. The major attraction of this is that landscape art scenes occupying more than a screen's width can be printed in one go; so this is a bonus for owners of Deluxe Paint and the like.

Database Module

General database principles apply, with up to 128 fields allowed for each database. Data entry is straightforward, and features an on-screen form designer which I find really helpful.

Fields can be sorted and indexed, and there are many mathematical functions which can be accessed within the database, and which are shared by the spreadsheet; for instance finding the maximum value in a field, or returning the square root of a number. The program is also compatible with dBase III file structures.

Manual

At over 500 pages, this is not light reading. Chapters dart about from one module to another in a disconcerting way, though all features are well documented.

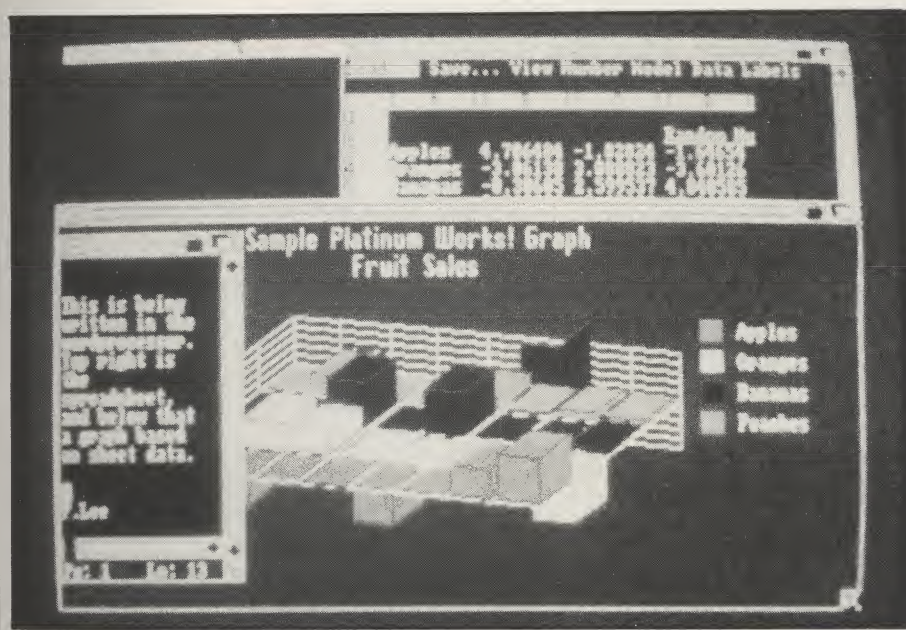
But for a product of this quality, I was alarmed to find a number of vital pages had been left blank - the last thing you need if you are a newcomer to the programs. In particular the database section was badly hit, so check this out before you part with your cash (check out 215/5 for instance).

Conclusion

Five programs united by a single interface is a major advance in the field of business integration. And when the programs are the tried and tested favourites of many thousands of Amiga users, then their proven track record speaks for itself. It is an old marketing ploy to stitch successful but old items of software together in a compendium; a lot of work has been invested in combining these programs and enhancing them. New and improved, they should open up a whole new market for MSS. Platinum? Maybe not that precious, but certainly very valuable. The Works! is not cheap, but it does reflect the cost of good quality business software and also the fact that you are getting five useful programs.

P.L.

Price: £199. Contact: Digipro Ltd, Enterprise House, Howards Grove, Shirley, Southampton Tel. 0703-703030



DTP Programs

Part V

John Walker provides a comprehensive overview of five DTP programs targeting both the enthusiastic novice and the serious professional...

The Amiga was a late starter in the DTP stakes, but is catching up quickly. Most Amiga DTP programs will run on a 512K machine. However, to do more than produce more than a couple of pages of text and graphics at a time, you will need an expanded memory and an external disk drive.

What functions do you need? A WYSIWYG (What You See Is What You Get) display will not show you a page in its entirety, so various levels of magnification are a help. There are several commercial programs available with this function. Publisher 1000 gives you the minimum: part of a page at full size with a whole page shown in miniature. City Desk and Shakespeare have variable levels of magnification.

It is also an asset to see more than one page of your production at a time. In publishing, the unit of design is two facing pages. City Desk and Shakespeare both include this option.

In addition, the keyboard instead of the mouse can speed up many operations, something which most programs allow. Word processing functions are also useful when making last minute changes to the text. Currently, only Professional Page and PageSetter have Search and Replace facilities. PageSetter's separate text editor, from which you can switch instantly to the layout screen, provides easy editing of long documents.

Most programs allow for a final page no bigger than 8 x 11.5 inches, which also tends to be the limit of many dot-matrix and laser printers. But with Professional Page you can layout a 17 x 17 inch page (though you will need to use an imagesetter to print it). Page-oriented DTP programs use boxes, or frames, to hold the text and graphics on the page. A Snap To Grid, to which text and graphics adhere, is a great blessing – as is a

customised grid that you can use as an underlying basis of your design. Better still is being able to specify numerically the precise size and position of boxes, rather than moving them around the page with the mouse. Only Professional Page has this refinement. If you are dealing with long documents, then being able to set up master pages to use as templates can save much time.

DTP is not only text – it is also design, and the two must work together in any good DTP program. Placing graphics is made easier if the program has automatic runaround, so that the text wraps around or moves out of the way, of graphics. This feature is found on Professional Page and City Desk.

Another time-saver is being able to link different boxes so that text runs from one to another and reformats when you make changes. City Desk's text flowing features are probably the best of any program so far.

In the end, though, what matters most is control over typesetting. The amount of space between letters and between words needs fine adjustment to achieve good-looking results, particularly when you're setting text in narrow columns. Here Professional Page is far ahead of all other programs, with its automatic hyphenation (breaking of words over lines) and kerning and tracking, which involve the adjustment of space between letters. Shakespeare allows no such typographical control at all. City Desk, which has automatic hyphenation when outputting to a PostScript compatible printer, has a useful feature to avoid "widows and orphans", lines containing a word or two at the end of each paragraph which look ugly when set at the top or bottom of a column of text.

All programs allow you to add frames or borders around the text and to lay tints or patterns behind the words. Publisher 1000

goes further by providing a pattern editor so that you can design your own. It also provides a good selection of unusual patterns.

Clip Art, ready-made images that you can add to your work, can enliven pages. City Desk, PageSetter and Shakespeare all come with a selection, though they are not very inspiring. Both City Desk and PageSetter have a separate graphics editor. PageSetter's is far more comprehensive and allows you to import modified images. Professional Page goes one step further by adding a structured graphics toolbox so that you can create charts or simple pictures that will reproduce at high resolution on a laser printer.

If you wish to use other fonts besides the dull selection provided with the Amiga, Publisher 1000 comes with several intended to print well on dot-matrix printers, including a special style to create unusual borders and frames. Shakespeare, too, has several specially designed fonts. A separate disk of attractive dot matrix fonts is also available for use with PageSetter.

Conclusion

Of the current Amiga programs, Publisher 1000 is the easiest to learn and use and is designed to work with dot-matrix printers. PageSetter and City Desk are the leading rivals for the best basic DTP programs, and both can be used with laser printers as well.

PageSetter's biggest limitation is its graphics handling – you are limited to small-sized images unless you resort to complex trickery. City Desk, conversely, handles text clumsily, requiring you to add embedded commands to your text to change typestyles and so on, which makes it more difficult to make inspired last minute changes.

For producing documents in colour, the choice is between the cheaper but typographically limited Shakespeare and the expensive but versatile Professional Page. If you need four colour separations for professional printing, or output to a PostScript compatible laser printer, then you will need to start saving for Professional Page.

But whatever program you use, you will find that from a desktop you can communicate with the world. Publish – and be delighted.

J.W.

continued on page 29

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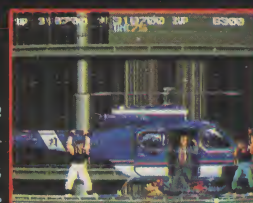
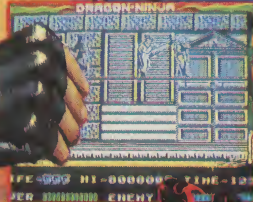
**BAD
BOIES** vs.

DRAGONNINJA

T.M.



**DATA
EAST**



Your Opponents in your battle for supremacy are

our types of Evil Ninja star-throwing Assassins whose skills are manifold and dangerous. Also out to spoil your day are Acrobatic Women Warriors, and vicious Guard Dogs. At the end of each level you must

overcome the Ninja Master in order to progress - some examples of these superhuman villains are: A fire-breathing Fat Man, an Armour

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PLAYER CONTROL

Stephen Rodgers casts an expert's eye over Ariadne's new laser-disk software.

Readers may be aware of my long-term involvement with Amiga graphics - I first wrote about the techniques we use to produce prototype television commercials (called Admatics) over two years ago. Since then we have not been idle bringing the graphics power of the Amiga to bear on a wide range of (mostly) advertising problems, and we now have four 7MByte A2000's, all with hard disks, and all the normal peripherals.

However, in one corner of our office - my corner - is an Amiga that is doing things with pictures at a speed and resolution that has to be seen to be believed. A Laserdisc player is responding to mouse and keyboard commands through some magnificent software by Ariadne Software, of "The Kickstart Guide To The Amiga" fame.

A brief description of the medium might be in order. Laserdiscs share the same encoding and reading technology as audio compact discs, and the same drawbacks: they 'Write Once' only; and cost hundreds of pounds to produce just one. There are two basic forms:

Extended Play (CLV). These have the information encoded in a spiral fashion analogous to vinyl music LPs. They contain pre-programmed tracks or 'chapters' and do not offer a 'still' picture facility.

Active Play (CAV). These do not offer as much capacity as the Extended Play type (36 minutes against one or two hours) because the data are recorded on 55,000 concentric tracks, and one track is one video picture, or a twenty-fifth of a second. This means that each of these frames is individually accessible, at a very high access speed, and here the sense of using a computer to control the player becomes apparent. As yet their use has been limited to big budget IV applications, such as training Tornado pilots and the BBC Domesday Project.

The core of the software is "player.device", which should be installed into the DEVS: directory and, when activated, expects sole use of the serial port. It is similar to "printer.device" or "serial.device" and



its task is the same - to field commands aimed at the video player and process them into the player's own language. The power behind this approach is that you can address different players in the same way as different printer drivers enable the user to control a dot matrix printer at one moment, and a colour thermal printer the next. Anything from a VHS player, through a Lo-Band UMatc, to both sorts of laser disc players can be controlled with similar ease - provided that the manufacturer has designed to equip the device with an RS232C serial port.

Obviously software cannot alter the performance of the chosen player, so at initialisation the driver interrogates the

player to identify it and the medium present, and then enables the relevant commands. Hence an Extended Play disc will cause the software to ignore any 'still' commands, and will make it expect any search instructions to refer to a chapter rather than a frame number. Equally a Lo-Band UMatc player will disable the 'instant jump' facility present on some laser disc players. This facility means that certain players can get to a frame no more than two seconds away in either direction without blanking the screen - some amazing video 'scratch' effects can be generated with this.

The package comes in one of those 'box within a box' affairs that convince

IBM software buyers that they have got their hands on some power. There are two discs, one with a dedicated 1.2 Workbench for those that wish to just plug in and go, and another one with utilities and double-clickable programs to install the various bits of code onto the user's own system - there is no copy protection and hard disc users are fully supported.

Results

The first disk that I have made is an Active Play disc that contains our showreel of work - some 13 minutes, and a selection of other video material, mostly television commercials. My version of the software is the first that contains a patch to enable SuperBase (by Precision Software) to talk to the player. SuperBase records have a type of field called an 'external field', this is normally used to display an IFF picture file, or play an IFF sound sample. Ariadne's patch means that each record in a database can refer to, and play, a specific sequence or still from the laser disc.

I have a batch file in my S: directory called 'STARTPLAYER'. Before this is run, a CLI command such as: PLA:PLAY, 34000, 35000 would have been treated by the system as an instruction to run an oddly named program from a volume or device named PLA: - the system would reply with a 'Please Insert Volume PLA' requester, followed by an 'unable to load etc. etc.' message. After STARTPLAYER is executed the same command causes the player to burst into life and play 40 seconds of video starting at frame number 34000. This is the CTI (Command Text Interpreter) functioning and is an example of the DOS player's role. All of the features of the particular player can be controlled in this fashion, but it would be tedious to 'log' (ie. identify all the required stills and sequences) on an entire disc in this fashion, and this is where the supplied program PLAYERCONTROL comes in.

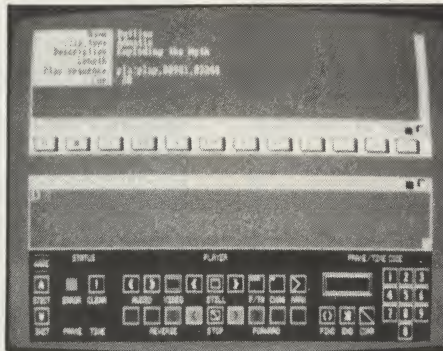
PLAYERCONTROL has a collection of gadgets controlling four different forwards (and reverse) speeds. It can also 'still' the player, 'mark' the frame under the play head, 'find' a given frame and 'nudge' the player one frame forwards or backwards. The calculator style keypad on the right hand side can be used to 'type' in required frame numbers, and the individual keys can also be used as calculator style memories. This means that up to nine locations can be 'noted' and quickly accessed. Menu selections invoke the Instant Jump controller, a very exotic function indeed, and the Macro Manager. Macros are a very important part of the whole suite, more of which later.

In advance of receiving my laser disc I had prepared a database of all of the sequences of interest on our showreel, each record having an empty external field. To start a 'logging' session I went through the following procedure:

1. Start Superbase and open the required database.

2. Resize the Superbase window and leave a long thin CLI window available - just in case.

3. Start PLAYERCONTROL and use the menu selection "Fold Display". This allows the program to occupy only the bottom 80 or so pixels of the display



Now any one of these programs can control all the features of the player, and the Amiga user can start chortling things like "only the Amiga makes it possible".

The first record in my database refers to our introduction sequence. The player was conveniently 'stilled' at frame 1 so I used the slow play button on PLAYERCONTROL to creep up to the start, I overshot so I used the 'nudge back' button to get to exactly the frame (frame 37) - I could have used the BACKSPACE and SPACEBAR keys on the keyboard to nudge it around as well. I then typed PLA:PLAY,37, into the external field on the database and did not bother to hit return. Then normal speed was invoked from PLAYERCONTROL, followed by the inevitable nudges, to identify the end of the sequence (frame 341). This number was then typed into the database, the relevant 'external' gadget then clicked and our intro sequence 'fell out' of the video player. These processes were then repeated over and over again until all the sequences and stills were logged (PLA:find,11020 is an example still frame command).

This ease of control is unparalleled on a micro, and it goes further than that. All of the logging could be done on U-Matic tape, in advance of burning the laser disc. This means that several people could work at once (U-Matic copies are very cheap), and all their results could be pooled once the disc had actually been produced.

Some of my sequences were very short, and when played in the above fashion the soundtrack was disjointed and distracting. PLAYERCONTROL has gadgets to control either or both sound channels (and video if required), they can also be controlled through the CTI. For the best results the instructions to switch the channels off, play the sequence, and then switch the channels back on need to be grouped together. This 'group' is the macro.

Macro

The definition of a macro can be started, and named, from a menu selection in

PLAYERCONTROL, or through the CTI. Thereafter any command to the video player, from any program, will not be acted upon and will be added to the list within the macro. Macros can call other macros, so complex sequences can very quickly be built up. Some lovely disasters can occur as well, such as a macro calling itself, but the manual points out some of the pitfalls. When finished the macro is added to the current macro list and can be saved to disk. One of my macros is called end-animation and the database record reads thus: PLA:macro,do,end-animation.

Macros have their problems though. They are basically programs in a specialised programming language and as such they frequently need de-bugging and altering. A diagnostic window can be opened which displays what the system is up to as it performs, and quite comprehensive error messages, so de-bugging is reasonably easy. However there is no way to edit an existing macro, it has to be re-defined from the start. As I intimated earlier building a macro can be quite easy, but a dedicated macro editor is badly needed. Ariadne say this will be available as soon as the user base warrants it. In the meantime, I am starting to construct various macro building tools myself.

Here is a final example of how all this fits together. When I had finished logging my showreel I had some fifty items in my database file. Endeavouring to present our material from this proved that the database approach was too linear. I needed one screen with all the item names visible at once, and the ability to choose any one with the click of a button. I wrote a simple Intuition program with 50 Boolean gadgets so that I could 'export' just the external fields (the field that controls the player) from SuperBase into an ASCII file and then incorporate this file into a string array in the program.

The main loop of the program then had simply to identify the number of the gadget that had been clicked and feed this element of the array into the player. It really was a very quick and very satisfying process. My next presentation was very slick indeed, with tiny snippets of animation being instantly summoned to make a point by just pointing and clicking.

Conclusion

With the slight omission of the macro editor, I cannot praise this software enough. The combination of multitasking Amiga, lightning fast laser technology and well thought out software produces stunning effects and I am sure that many new applications of laserdiscs will now be invented. Having access to video editing, computer graphics and laser discs means that we are now involved in some very interesting projects.

S.R.

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continued from page 24

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Price	£249.95	£89	£114.95	£99.95	£143.75
Memory required	1 Mbyte	512K	512K	512K	512K
General operation					
Maximum number of pages	999	99	Memory	Memory	Memory
Number of magnification levels	5	3	Variable	2	Variable
Keyboard equivalents of mouse	Yes	Yes	Yes	No	Yes
Stores text and graphics separately	No	No	No	Yes	No
Displays facing pages	No	No	Yes	No	Yes
Page layout					
Maximum page size (inches)	17 x 17	8.5 x 14	8.5 x 11	8 x 11	8 x 10
Snap to grid	Yes	Yes	Yes	No	No
Adjustable layout grid	Yes	Yes	Yes	Yes	No
User-selected ruler units	Yes	Yes	Yes	Yes	No
Place and size boxes numerically	Yes	No	No	No	No
Left/right master pages	Yes	No	No	No	No
Default page	Yes	Yes	Yes	Yes	No
Insert/delete pages	Yes	No ¹	Yes	Yes ²	No
Automatic page numbering	No	No	Yes	No	No
Headers/footers	No	No	Yes	No	No
Text handling					
Embedded formatting codes	Yes	Yes	Yes	No	No
Copy	Yes	Yes	Yes	Yes	Yes
Cut/paste	Yes	Yes	Yes	Yes	Yes
Search and replace	Yes	Yes	No	No	No
Import/export text file	Yes	Yes	Yes	Yes	No ³
Import formatted text file	Yes	Yes	Yes	No	No
Automatic runaround	Yes	No	Yes	No	No
Link/unlink text flow	Yes	Yes	Yes	Yes	No
Superscripts/subscripts	No	No	Yes	No	No
Text effects					
Shadowed characters	No	Yes	No	No	No
Outline characters	Yes	Yes	No	No	No
Reversed characters (white on black)	Yes	Yes	Yes	Yes	Yes
Grey-scale characters	Yes	No	No	No	Yes
Typesetting					
Range of font sizes	1-127 pt	Variable	Variable	Variable	Variable
Line spacing increment	0.01 pt	1 pt	0.1 pt	1 pt	1 pt
Paragraph spacing	Yes	No	Yes	No	No
Hanging indents	Yes	No	Yes	No	No
Tracking increments	0.01 pt	1 pt	No	1/120 inch	No
Baseline increments	0.001 pt	No	No	No	No
Automatic kerning	Yes	No	No ⁴	No	No
Kerning increment	0.01 pt	No	No	No	No
Automatic hyphenation	Yes	No	No	No	No
PostScript output	Yes	Yes ⁵	Yes	No	Yes
Graphics handling					
Maximum size	Full page	1/4 page	Full page	Full page	Full page
Line/border patterns	9	5	3	7	1
Custom lines/borders	Yes	No	Yes	Yes	No
Fill patterns	9	16	No	11 ⁶	No
Automatic drop shadow	No	Yes	Yes	No	No
Clip art	No	Yes	Yes	No	Yes
Templates supplied	No	No	No	No	Yes
Half-tones	Yes	No	No	No	No
Import structured graphics	Yes	No	No	No	No
Bitmapped graphics toolbox	No	Yes	Yes	No	No
Airspray	-	Yes	No	-	-
Boxes	-	Yes	Yes	-	-
Brushes	-	Yes	Yes	-	-
Circles	-	Yes	No	-	-
Freehand	-	Yes	No	-	-
Lines	-	Yes	Yes	-	-
Magnification	-	Yes	Yes	-	-
Structured graphics toolbox	Yes	No	No	No	No
Bezier curves	Yes	-	-	-	-
Boxes	Yes	-	-	-	-
Circles	Yes	-	-	-	-
Ellipses	Yes	-	-	-	-
Lines	Yes	-	-	-	-
Polygons	Yes	-	-	-	-
Colour handling					
Number of colours	16 at a time	-	-	-	32
HAM (4096 colours)	Yes	As b&w	No	As b&w	No
Four colour separations	Yes	-	-	-	No

1. You can arrange the order of pages

2. You can insert a blank page that will delete the current page

3. You cannot export a text file from Shakespeare

4. In PostScript mode there is automatic kerning

5. With the addition of LaserScript (£29.95), a PostScript printer driver supplied with four fonts

6. Has its own pattern editor

cont. on next page

continued from page 29

To Print!

What 'occurs' on your screen is only as good as what is output to your printer. Here is a list of over 25 printers from which you may choose. (Check your local retail outlet for details – all prices exclude VAT and delivery.)

Make	Model	Columns	Draft/NLQ	Pins	Price Ex VAT
Panasonic	KX-P1081	80	120/24	9	£145
Star	LC10	80	144/36	9	£180
Epson	LX800	80	150/24	9	£185
Star	LC10-C	80	144/24	9	£215
NEC	P2200	80	168/56	24	£275
Star	LC24-10	80	170/57	24	£289
Star	NX15	136	120/30	9	£289
Panasonic	KX-P1592	132	180/38	NA	£299
Star	ND10	80	180/40	9	£299
Epson	FX850	80	NA/NA	9	£329
Amstrad	LQ5000	80	288/96	24	£360
Star	ND15	132	180/45	9	£365
Star	NR10	80	240/80	9	£397
Panasonic	KX-P1595	136	240/51	NA	£395
Epson	FX1050	132	NA/NA	9	£415
Star	NR15	132	240/80	9	£429
Panasonic	KX-P1540	136	240/80	NA	£465
NEC	P6+	80	265/90	24	£475
Epson	EX1000	136	300/50	24	£565
NEC	P7+	132	265/90	24	£599
Star	NB24-15	132	132/30	24	£615
Epson	SQ2500	132	450/150	JET	£875
Epson	LQ2500	136	333/111	24	£975
Epson	DFX5000	136	533/NA	24	£1295
Epson	GQ3500	-*-	6ppm	Laser	£1295
HP	LaserJet2	-*-	8ppm	Laser	£1445
Star	Laser 8	-*-	8ppm	Laser	£1495
Cannon	LBP-8 II	-*-	8ppm	Laser	£1595
Panasonic	KX-P4450	-*-	11ppm	Laser	£1645
Brother	HL-8	-*-	8ppm	Laser	£1695

NA – Information not available

-*- – Does not apply

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Transcript

As yet another word-processor is released for the Amiga, Peter Lee examines how it justifies its existence.

More and more these days, the edges between home and office life are beginning to blur. Many people take work home - it may simply be quieter there, or the pressure could well be on to show your commitment to the job. Either way you will need to present your efforts in a professional way without too much hassle, but many serious applications can be a struggle to learn.

As far as word-processors go, all I need to be able to do is enter text at the keyboard, format it for presentation, and get on with more important things.

"Transcript is a compact and effective word-processor which is simple to use, and very friendly."

The people at Gold Disk are obviously of the same mind. Their new addition in the Home Office Series, Transcript, is a compact and effective word-processor which is simple to use, and very friendly.

Gold disk have an established reputation already through products such as MovieSetter and Professional Page, and this new release falls nicely into their desktop presentation catalogue. The program is supplied on a single unprotected disk, which boots into a Workbench, and a smallish manual with plenty of well-expressed advice. To conserve memory, the program can be invoked from the CLI.

Despite the fact that Transcript comes on one disk, it is a full-feature utility which is accompanied by a number of extras - including a 90,000 word spell-checker which can be loaded into memory if you have the space. Although the program will work on a single-drive, 512K Amiga, you could find this restrictive, and users with extra RAM and an additional drive will be best suited.

Many nice touches make Transcript a pleasure to use. There are subtleties such as: the ability to configure the numeric keypad to act as the cursor control (more usually found on PCs), with Home and End keys; or, the wonderful print-preview which shows your document fully formatted, allowing you to use the mouse to scroll through its entire length quickly and effortlessly.

Using the Amiga's multi-tasking abilities, several documents can be open on screen, simultaneously, and each can have its own individual setting in terms of colour, line-length and so on. Transcript's screen defaults to the standard 80 column Workbench mode, but you can define your own, using interlace or not. Regarding custom screens, you may define your own screen colours, but the default screen simply uses Workbench settings. Standard screens use the Topaz 8 font, while an interlace screen (the one prone to flicker), uses Topaz 11 for improved readability.

And to help conserve memory, document windows can be shrunk to a minimum size until re-activated by a mouse click.

There is a fall-off in speed in some word-processors when dealing with lengthy documents, but Transcript's boast is that there is no speed penalty for the longest items, and I must admit to being impressed with screen updates; on my usual word-processor I installed Blitz-fonts to keep things moving, but this would be unnecessary here.

But down to the nitty-gritty of operation: Transcript's fast screen update makes editing a pleasure, and once you have defined your startup-defaults - for

instance the size of the text window can be set to whatever ratio you prefer - they can be saved and subsequently loaded in automatically.

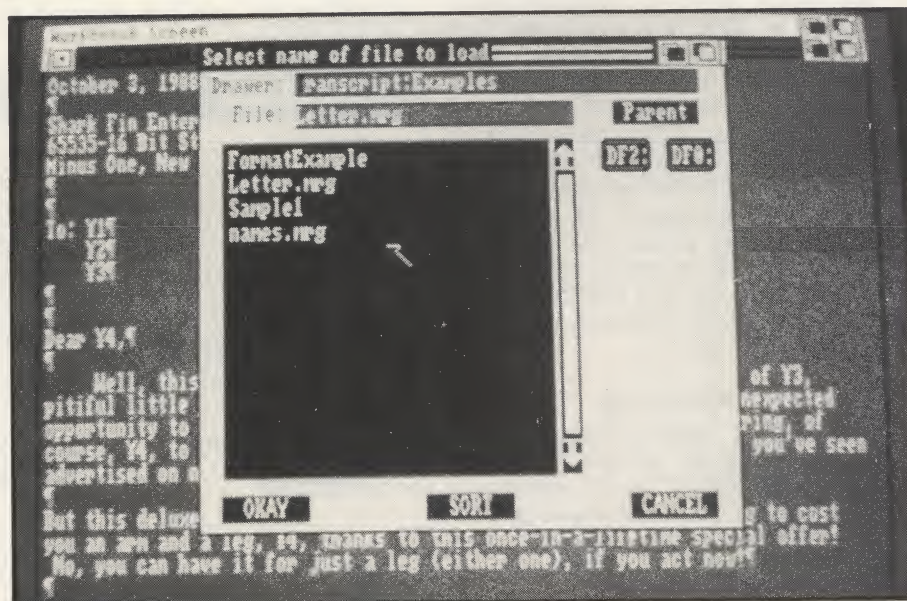
"Moving around documents is straightforward, with key combinations usefully allowing large-scale movement."

Moving around documents is straightforward, with key combinations usefully allowing large-scale movement. And there is the welcome inclusion of user definable markers; up to four 'bookmark' reference points may be defined using Shift and a function key, and these can be instantly reached simply by pressing the correct function key. In this way, referring back to earlier text is easily managed.

The version of Transcript under test was 1.0, and obviously some enhancements had been made since the manual was published which were recorded in a document file on disk. Chief among these is the inclusion of a macro facility.

For those unfamiliar with macros, they are simply a means of duplicating a series

continued on page 40



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ANIMagic

Hey presto - special effects wizardry comes to your Amiga with a new video program. Peter Lee conjures up some opinions...

The recent crop of video packages has signalling the start of what could well be the Golden Age of graphics for the Amiga. A short space of time has seen the release of leading-edge programs such as Zoetrope, DeluxePaint II and Photon Paint II - three immensely powerful utilities which have heralded a new generation of precision software.

And the top flight are now joined by a newcomer, ANIMagic, from the Aegis stable. This video effects editor and generator lags a little behind the competition in terms of ease of use, but its performance places it right up there with the best.

Even though there are many graphics effects programs, each with their own specialities, ANIMagic has no real counterpart. It is an expensive fact of life that in order to get the best effects possible, you have to pick and mix from a variety of programs, and ANIMagic has some of the choicest.

The program arrives on a single unprotected disk, along with a data disk and a manual I found disappointingly sparse. At least 1meg of memory is needed, with greater flexibility offered to those with more. A version of the program on disk supports the 68020 and math co-processor board for a promised boost in speed, though this was not tested. As the program creates its animation by rendering sequences of fra-

The program works in any screen resolution in PAL display, which permits use of severe overscan for best videotape effects, in HAM mode as well as halfbrite and interlace. In addition, with extra memory, you can also define your own screen format up to 1008 x 1008 pixels.

ANIMagic started life as an ANIM file editor - for working on data created or used by the likes of Videoscape 3D, Lights!, Camera!, Action!, DPaint III, The Director and the Hash Animation series. However, it has developed into a much more sophisticated utility that also creates transitions from one still IFF picture to another as well as manipulating animations themselves.

Its prime function is as either a desktop presentation aid or as a videotape titler when used in conjunction with a Genlock. It succeeds well in both fields. Yet unlike DPaint III and to a lesser extent Zoetrope, ANIMagic has no art tools to call its own; your source graphics must be created in another package and then imported. However, even a sequence of simple text title screens composed in DPaint in three minutes can be turned into a knockout special effect with ANIMagic.

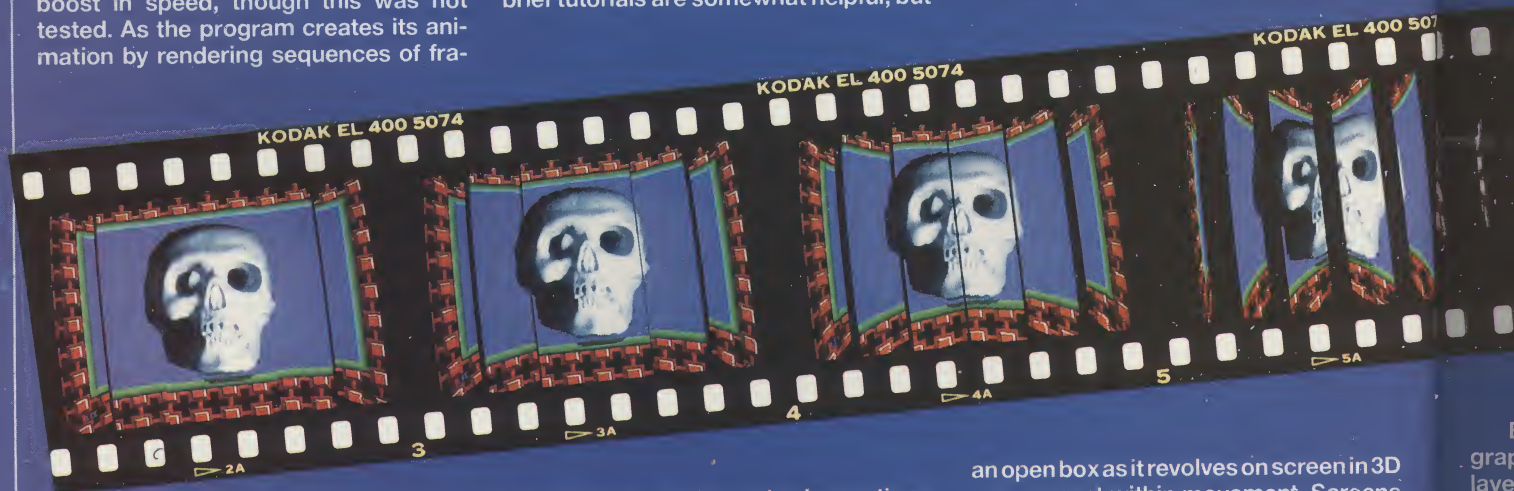
Suprisingly the manual tends to underplay the actual effects available. Its brief tutorials are somewhat helpful, but

standard, but they are spectacular. For example one transition allows you to build up a picture by swarming onto a blank screen 256 small portions of it until the whole is complete. OK, whilst it is not as sophisticated as the similar effect on some tv shows, it is nonetheless a major advance in home presentation. You can even have each piece leave a fading trail behind it!

The downside is that all this processing power takes time; subsequently for some effects you can happily leave the computer for an hour or so. But once the finished animation is closed and played back, the effort really is worthwhile.

Controlling the program is achieved through a number of control panels offering mouse-operated options, some leading to sub-panels where a variety of customizing can be undertaken to tweak a standard effect into something more personal. From the outset ANIMagic needs something with which to work: a standard IFF screen; a pair of screens over which to effect transitions; or an ANIM file. Any combination of a.twork can be used - you can move a still screen over an animation, or paste a full animation over a separate backdrop.

Because effects can be cumulative, you can use, for examples, a 25 frame animation as the artwork for each side of



mes individually and then playing them back in realtime, often the process can be very slow, so any improvement in calculation speed should be welcomed.

what for me are the major innovations are only mentioned in a brief list of transitions available; the user must discover them.

This self-effacement would be understandable if the effects were sub-

an open box as it revolves on screen in 3D - movement within movement. Screens of different resolutions can also be mixed, but the results are often peculiar.

On a simpler level, just by creating a transition from one graphic screen to another, startling animations are possi-

ble. For example, you may produce the simulation of book pages turning to reveal another screen, a pair of doors opening inwards in 3D exposing more artwork, or even another animation playing happily in the background.

The main control panel looks a nightmare of buttons and boxes, and indeed there are few intuitive aspects of it. The manual here at least is a big help, and the program features on-screen help which outlines the operation of the baffling buttons. Easier to understand is the source and destination mixing panel, where pop out menus enable selection of any graphics in memory to be used as the basis for effects. You call up the DVE (Digital Video Effects) menu, which is the real key to the program's potential. (the DVEs are loaded in from disk as needed or you can actually have everything load into RAM from the outset, but this could cause memory shortfalls), and a brief explanation of the FX appears on screen.

"Any combination of artwork can be used - you can move a still screen over an animation, or paste a full animation over a separate backdrop."

Before you commit the computer to an hour or so of image generation and then discover the effect is not what you wanted, there is a wire-frame preview option which shows exactly what will happen. Various additional parameters, such as changing the direction from which an effect begins, or flipping it horizontally or vertically.

A run-down of ANIMagic's key effects.

Expand from a point
Horizontal blind
Spins
Split
Squeeze in and out
Vertical blind
Four piece wrap
Box rotations, images on facets
Confetti swarm
Corner expand
Ten door blind curtain
Doors swing inwards
Dribble down
25 fragment spin and tumble
TV style page turnover
Slide in and enlarge
Tumble
Nine part foldout
Main body of text in here.

closer or further away, or "tell" the program what to put on the backside of an image as it turns. This effect can include another image or a simple colour.

There is a comprehensive colour-cycling menu, where up to 8 separate ranges of colours can be specified to act on individual frames or the whole range. This is a fine enhancement enabling you to achieve pseudo-movement simply within a more complex animation effect. I did find a problem, though, when the program insisted on cycling ranges of colours without any instruction. However, by turning off cycling this was soon cured.

Palettes themselves can be swapped and changed. Given two palettes from a set of different screens to be overlayed together, ANIMagic will optimise the colours of each to try to make them compatible as far as possible. Because the

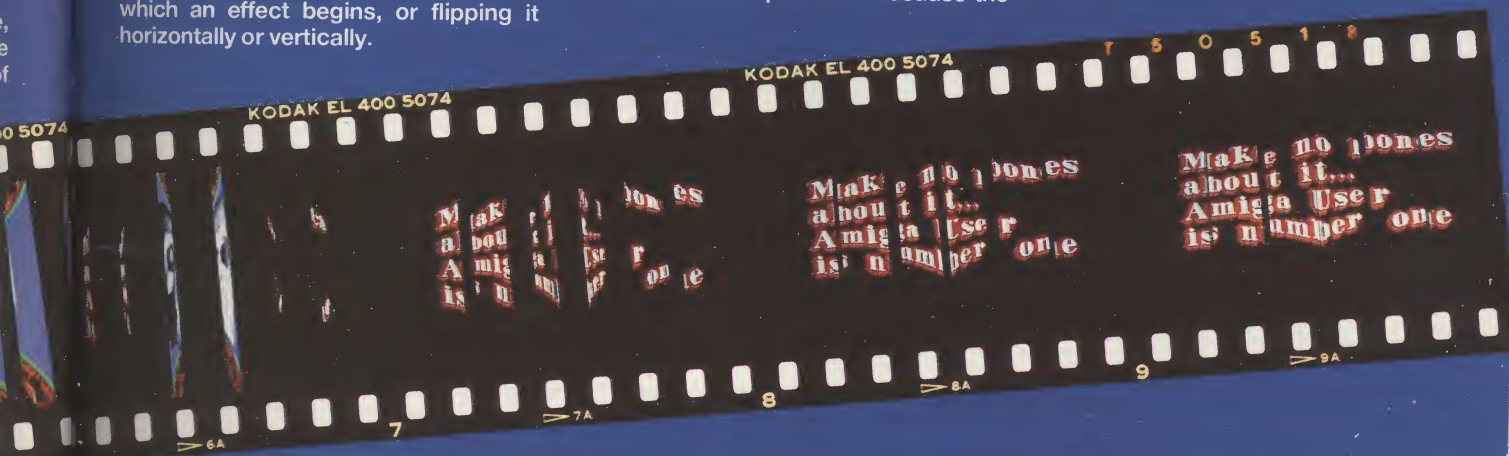
into manageable portions, and then to combine them with the ANIM player that accompanies the program. Incidentally this is a freely distributable player that can be invoked from the CLI, but which is not auto-booting, (much to my disappointment). In addition, as well as complete animations, single IFF frames from an animation can be saved.

Conclusion

ANIMagic works on two levels. Not only is it an innovative editor for existing animations, allowing users to cut and splice sequences which may have taken many hours to generate or perhaps add title screens and credits to work done on powerful graphic programs; but it is also a special effects generator, which creates some unique and professional transitions for either video dumping or desktop presentation. These take a high degree of forward planning to use to their best advantage, and the range of control options is so great as to be initially bewildering.

The manual should have been more helpful, better illustrated and much more comprehensive. Twice during heavy testing I overstretched the program and was GURUED out. Fortunately, because one always works on images loaded from disk, only part of an animation was lost.

ANIMagic measures up to any special effects program in the price range, and has a more spectacular set of effects than any other I can name. The other deciding factor may well be that ANIMa-



Backgrounds are available from any graphics in memory, allowing animation layering, and shadows with user-defined transparency. Moving objects can be made to leave gradually fading trails behind, and if you customize a DVE map, you might consider saving it for another occasion. Some DVEs work in 3 dimensions, and you can move the viewpoint

program maintains its own palette at all times, there is no danger - as with some other programs - of importing a set of colours that make the menus unreadable.

One of the dangers of long animations using anything other than lores is that you might well run out of disk space; even a blank disk's 880K soon fills, despite good ANIM compression techniques. The solution is to split a sequence

gic works in every screen mode (HAM being the most colourful, but also being quite sluggish on playback), has severe overscan options, and above all gives it you in PAL.

P.L.

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Amiga 3D Graphic Programming in BASIC



by Jennrich, Massmann and Schulz

It is likely that most people will have upgraded to the Amiga from an 8-bit computer - one they probably invested a long time in mastering. Which makes it all the more frustrating to try and come to terms with the intricate powers of the Amiga. You find your knowledge of offset locations, screen modes and memory maps are skills frozen by the march of technology. More often than not, you find yourself starting from scratch.

If you want to avoid becoming a casualty of the Amiga's involved operating system, you will be well advised to get some specialist help on the job. Abacus, US publishers rapidly earning the reputation as a beacon for floundering Amiga enthusiasts, have a range of books to unlock Commodore's powerhouse and help rekindle the feeling of programing achievement you might well have given up hope of ever recovering.

Latest in their line is 'Amiga 3D Graphic Programming in BASIC'; Not a title which trips off the tongue, but one which definitely lightens the heart! I have to say at the outset that techniques outlined in the book rely heavily on mathematic

principles; on the other hand, the authors make a brave job of trying not to cloud the issue, and provide information at a moderate level, fully explaining the more complicated equations. However, coming to terms with some concepts covered is a struggle at times.

At the core of the 358-page large-format paperback book are programs in AmigaBASIC for defining and rendering your own 3D images. The emphasis is on ray-traced screens, and some of the effects generated by the BASIC programs are on a level with some commercial software. But the book contains more than simply pages and pages of program listings; it is really a tutorial which, by example, introduces the reader to the actual power available through BASIC - which tends to be relegated these days in favour of the higher level languages. It opens up the Amiga's 3D potential, and gives access to all resolutions - including HAM, and halfbrite (which needed the arrival of DeluxePaint III to really take off).

If you follow the book through to the end, copying out the listings, what you end up with is a ray-tracing editor and object

definer. And along the way your understanding of the Amiga will have blossomed. The programs themselves are competent, allowing positioning of light sources, shadowing and texture.

There is a disk available containing all the book's programs, so unless you are the kind of keyboard fanatic who has days to spend copying listings, I would heartily recommend this as a priority purchase; the extra \$14.95 spent on the disk is a good investment considering that some of the BASIC programs have also been compiled and included on disk too. This is a major advantage when considering the lengthy time it takes to create a ray-traced image - compiled programs work faster than BASIC ones.

'Amiga 3D Graphic Programming' is a book recommended for the serious DIY graphics enthusiasts, but not one for those just wishing to dip their toes into the deep waters of Amiga graphics.

P.L.

Price: \$19.95. ISBN 1-55755-044-1.
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Contact: Abacus, Dept L2, 5370 52nd Street SE, Grand Rapids, M1 49508 (USA). Tel. (616) 698-0330.

The Amiga in France

France was one of the slower countries into the Amiga Dimension. Zack Mule Skinner discovers that in a Dordogne village a little 'guerre' has been fought over a French language Amiga publication

Take one Amiga 500, one A501 internal memory expansion, two external disk drives, and a second-hand monochrome monitor. With this potent mixture, create the first nationally-distributed magazine in your country to be produced 100% on a "family" computer.

This is the story, and it could, perhaps, have been anyone's. For years people have been talking about the way computers are going to revolutionise our lives. Well, this is an example showing that they weren't just fairy tales, and the Amiga is probably the best-placed computer to make them come true.

The country: France. The year: 1988. The headquarters: a stone-built farmhouse tucked away in the secret folds of the hilly Dordogne; a marginal, isolated region, where even the small farmers are dying out, to be replaced by visiting tourists from Germany, Holland and especially, Britain.

The story of A-News (the A is for Amiga) began when British journalist Bruce Lepper, living with his French school-teacher wife in the Dordogne village of Mandacou, heard in 1987 that Commodore was bringing out an affordable version of the Amiga dream-machine (he'd been dreaming about having one for years). He bought one of the first 500s to be sold in France, and was not disappointed. But there was no French language magazine for the Amiga – hardly surprising, because at that time the number of Amiga 100s sold in France totalled less than 5000.

A few months later Rod Craig, another British journalist living not far away in the equally sleepy village of St Aubin, decided to buy a bankrupt printing works. He asked Lepper if he could create a publication that would bring regular work to the ancient presses in addition to their monthly task of bringing out Craig's 'The News', a paper for English-language residents in southern France.

Until a year ago the idea of one person with no capital to speak of starting a nationally distributed monthly magazine would have been unworkable. Magazines are traditionally costly items to produce. You need an editor, an advertising sales person, a secretary to look after your administration and subscriptions, and an editorial assistant to type in articles and help with page layout at the very least. Not to mention a team of freelance writers to help blacken the pages. You then have to pay for the photocomposition of your pages and the colour separation of your pictures, and then the printing and then the distribution, which can be an expensive nightmare.

Lepper didn't realise any of that, so he suggested that he and Craig go into partnership and produce a French-language magazine for Amiga users, to be called Amiga-News. Great idea! Let's go!

No 'AMIGA'

January 1988: first stop, the headquarters of Commodore-France in Paris. Top officials there (or should we say almost-top) welcomed the idea.

Second stop, the Ami-EXPO in Los Angeles, to make first contacts with the Amiga industry and garner good material for the first issue, together with a copy of Professional Page, and a Spirit Inboard (which was not actually installed in the A-News A500 until three months later). Gold Disk had been promising Professional Page for some months, and the copy Lepper received was one of the first. Without it, the magazine would never have been born.

Back in France, disaster! Inexplicably, to Lepper, Commodore withheld permission for the use of the name Amiga in the title, so it was changed to A-News. Commodore refused to give any publicity to the magazine, so the initial print run was reduced from 10,000 to 7,500. Commodore

France went so far as to forbid the use of the words 'Amiga', 'Commodore' and 'Workbench' on the front cover and also refused any other co-operation. But A-News No. 1 was on the news-stands in March 1988, before the official Commodore Review had made its appearance. The cover (a preview of The Three Stooges) was colour-separated by a specialist in Bordeaux at a cost of about £300, as would be the next two covers. Professional Page version 1.1, with built-in colour separating, came out two months later, reducing this cost to about ten pounds.

But what about all the other costs? Amiga users from all over France, delighted that at last their magazine was getting its own dedicated publication, offered their unpaid co-operation. And as they all had Amigas (bizarre, bizarre) and sent in their material on disk, there was no need for a secretary to retype it. And as the articles were made up into pages on the screen (with the three drives on the A500 chugging away day after day), there was no need for a layout man or scissors. And as the pages were sent to Rod Craig's post-script laser printer they were immediately 'camera-ready', cutting out the expensive photo-composing element. In his spare time, Lepper typed subscribers' names and addresses into Superbase, sold advertising over the telephone (the only thing the A500 didn't do), and visited Amiga shows in Paris, Frankfurt, London, Philadelphia and New York. Amiga users in France were often informed of new developments on the Amiga scene before their counterparts in the USA.

French Translations

The French market has been, and still is, one of the most difficult for the Amiga in Europe. The Amiga is a brilliant but complex machine to get to grips with, and its user interface is exclusively written in English. Whereas Germans and Scandinavians are used to coming to terms with English because their own languages are relatively isolated, the French are different, having a national language which, like English, is a kind of international standard. So though French people who understand English are highly enthusiastic about the Amiga, others who do not are less appreciative.

Among other things, what the French

continued on page 110

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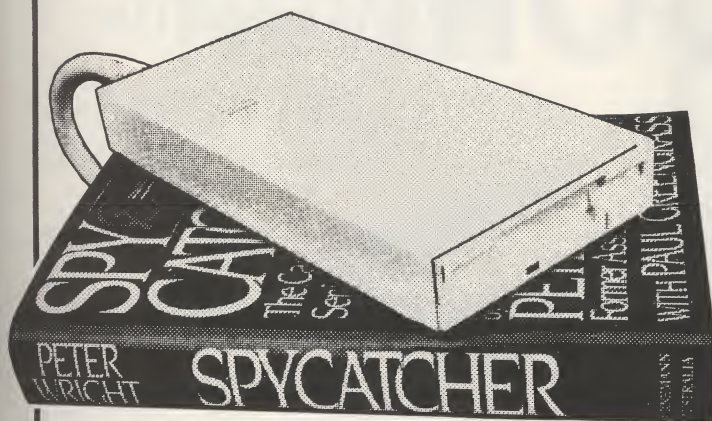
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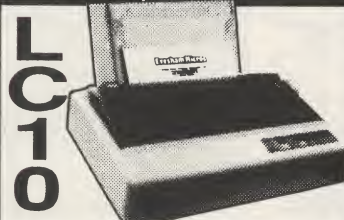
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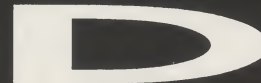
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of stored keystrokes. Up to 99 key presses can be recorded under each of the 10 function keys - simple things such as your address, or more complex text manipulation like italicizing a paragraph. Unfortunately responses to requesters cannot be incorporated into a macro, but generally, anything you can do while in the text window can be mimicked by a macro; and a macro can call another if you run out of room.

There is a special use for macros 9 and 10, which allows them to be called by pressing CTRL and a mousebutton.

Your macro definitions can be saved and loaded whenever needed, so a series of specialist commands can be made available as required. The usual word-processing tasks of cutting and copying are simplified by the use of a drag cursor with which you highlight your text. Unlike some other programs, even after highlighting text, you are still free to type and edit your document. Should you wish to append various sentences or paragraphs to each other, even though they may be scattered throughout the length of the document, you can copy them one by one into the clip buffer and paste back the accumulated text.

The actual layout of your document is controlled by formatting controls, which are defined using a strange keyboard character I never thought I had - a sort of

double S invoked by pressing Shift/Alt/S. Many commands can occupy a single line, separated by colons, and among functions you can define are margins, justification, headers, footers, page size, and widow and orphan control (to ensure space exists on the page for a minimum number of words before a break). Your own printer escape codes can also be embedded in the document.

As mentioned, there is a spelling checker available, and you can choose to load this into RAM at any time. For users with limited memory, spellings can be checked directly from disk, which is a much more laborious way. User dictionaries can be created, and the method of checking is extremely friendly, with a thermometer bar showing the progress through the document.

There are still a couple more goodies to itemise; in particular the index function is a big time-saver. A simplified but tolerable Mail Merge option is also available, and there is a useful option which will try to strip all the end of line paragraph marks that sometimes get imported on uploaded ASCII files. And to conserve memory, there is a version of Transcript on disk which lacks the print facilities and is consequently shorter than the standard version. Another useful touch is the use of 'hot' directories, which store filenames in a memory cache and prevent the constant

disk access of other programs each time you try and load or save a file.

Finally, users of the company's Professional Page 1.2 or higher can use Transcript as an auxiliary editor, and owners of earlier versions can still import Page's text for editing and mask out the DTP software codes.

The manual is a treat in terms of clarity. If you intend using the program disk as Workbench, then you may have to import your own Preferences printer driver from one of your Workbench disks, as these are lacking on the Transcript disk.

Conclusion

As a professional writer who opts for the easy life, Transcript was the perfect WP, which I used to write this review. It is not just the attraction of the new; I felt at ease with a full-feature word-processor which has obviously not sacrificed power for simplicity. Obviously if you prefer a degree of technical complexity from your word processor then you need to look at a more up-market product. But for my needs I found little lacking in Transcript, and much to recommend it. It is well-designed, simple to use and very efficient. And it has a very healthy price-tag too.

P.L.

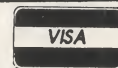
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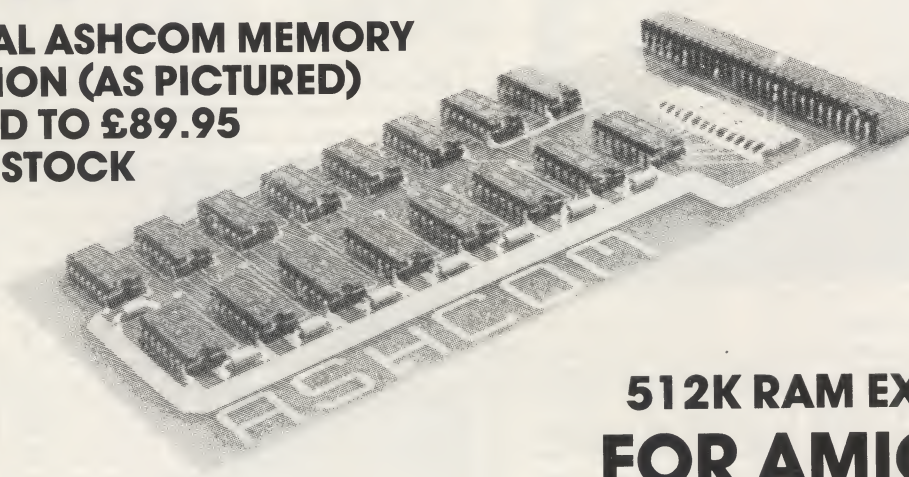
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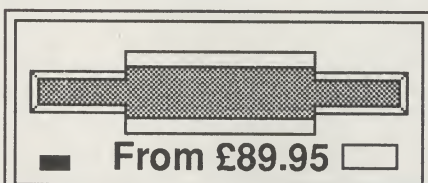
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Amiga

The Amiga: Los Angeles' Rising Star

The popularity of the Amiga is booming in Hollywood and the surrounding Los Angeles area. At the center of it all is the Amiga Video-Graphics Guild, an organization of Amiga enthusiasts who are using the Amiga in their everyday jobs as Producers, Disney Animators, Special Effects Designers, Video Editors, and Commercial Artists.

With over 100 active members, many of them well-known names in the Amiga community, the GUILD offers a once a month opportunity to share techniques, see the latest products, and get to know others using the Amiga as a serious tool for graphics and video.

Guild coordinator Geoffrey Williams is Executive Producer for Creative Business Communication, and has used the Amiga to create multi-media slide shows and videos for corporate clients. On several projects, the Amiga has been used to Storyboard, Score, and create the finished graphics and animation.

Whilst Robin Hart and Nadine are not professional artists, pictured here is the art of several Guild members. 'Lily Pad,' figure 1, is by Robin Hart. 'Rebecca,' figure 2, is by Eric Daniels, 'Gene,' figure 3, is by Nadine.

Eric Daniels is a professional animator who worked on Disney's *Who Framed Roger Rabbit?* He also used his Amiga Roger Rabbit images in the development of Buena Vista Software's computer game version of the movie.

The Amiga was also used to create animation on *Max Headroom*, *T.V. 101*, and several other network television shows. Walt Disney Studios use the Amiga for 3D animation and Ray Tracing, and Disneyland uses them to control laser presentations.

Art





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PLAN/IT

At last! Mark Smiddy raves over a new standard-setting spreadsheet which looks set to revolutionise business software on the Amiga...

When it comes to proper business software for the Amiga it is very rare I can honestly say I have come across a package which is almost totally without faults. Plan/IT, a combination of a spreadsheet and database, is just such a package. Although this is more of a preview than a full review, I hope to give you just an inkling of how good this package is.

Plan/IT is supplied on a single disk with a 238 fully indexed manual. Before discussing the system itself, a word about the documentation, which, like the software is among the best I have ever come across. Unlike many references of this genre, Plan/IT's manual is aimed at getting you started quickly. Experienced users can easily skip sections and beginners should find it easy to follow. Each section is finished with a summary of the points discussed, so you can easily keep track of what you should know. After saying that, it is unlikely experienced users will need to consult the manual much!

"Plan/IT presents a "standard" file selector but makes no attempt to list the files on the disk unless you ask it to!"

The software can be run from Workbench or CLI depending on your preference. Workbench users will be pleased to note, Plan/IT saves icons for files and sets the default tool. The upshot of this is all you have to do is find the sheet you want and

double click it - Plan/IT loads automatically.

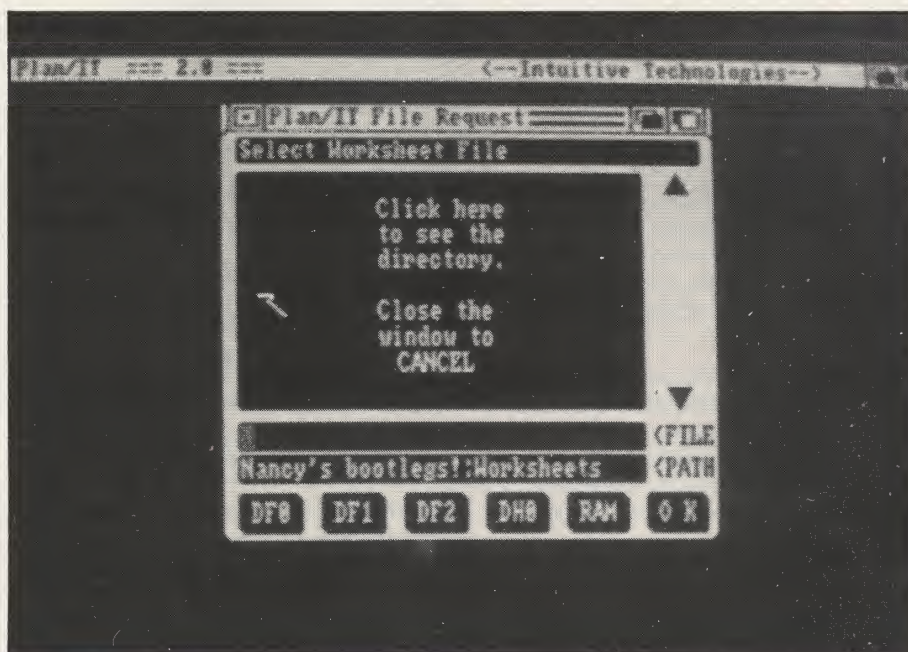
Loading from the main program is so well thought out it too deserves mention. Plan/IT presents a "standard" file selector but makes no attempt to list the files on disk until you ask it to! This speeds the operation immensely, because you can enter the path and filename, then press return to load it. If you specify an incorrect name, Plan/IT responds by suggesting you may have made a spelling error and gives you a chance to try again - nice touch that. The only problem with this requester is it only lists the devices DF0: to DF2: plus

DH0: and RAM:. This should cover most applications though.

Getting Started

Perhaps the biggest headache with all spreadsheets - and databases come to that - is setting them up. This is another area where I can find no faults with Plan/IT - it is very user friendly without getting fresh. To this end, mundane operations like the effect pressing Return has, have been covered: it can have no effect; move the cursor down or left. This eases data entry considerably.

continued on page 106



PD Special Edition - The Virus Killers

This month, Stuart Williams stalks virus makers

In response to the increasingly stupid antics of a few warped individuals who have inflicted various strains of so-called computer 'virus' on the Amiga world, a few public-spirited individuals have put their programming skills to work to enable you, the user, to 'vaccinate' your Amiga and save you from at best considerable irritation and at worst loss of valuable time and money. While there are many Public Domain or Shareware 'Virus Killers' around, most are only useful for combating one or two of the early strains of virus, such as the SCA or more recently the Byte Bandit variation. Amongst the more versatile paragons of programming, three programs stand out as being practically essential to the streetwise Amiga user looking to practice safe computing...

VirusX 3.20

Written by Steve Tibbett from Ontario, Canada, VirusX is, in its latest incarnation, truly the complete virus removal system! Being a truly public spirited person, Steve has released VirusX into the Public Domain (it remains copyright but is freely redistributable).

Like previous versions, VirusX 3.20 can be used via CLI or Workbench in two ways; either add it as a command to your Startup-Sequence, in which case it will run

every time you boot, or run it from its icon on the Workbench. When run, it will open a small window so you know it's there, and will display messages in it, indicating the number of disks checked so far (it automatically checks all drives as soon as a disk is put in them), the number of disks installed to dispose of a virus, and a full list of viruses found and their numbers. It is

"If VirusX finds a boot block it is suspicious about, it will present the user with a requestor either warning him that the disk has a virus (of whatever type), or tell him that the boot code is non-standard."

here that you see the true power of VirusX - for not only is it able to diagnose the various strains of the original SCA virus, but also the infamous Byte Bandit, North Star, Byte Warrior, Revenge, Obelisk, IRQ, Pentacon Circle, and SystemZ 'organ-

isms'!

Just in case there is a new virus which it has not encountered before, the disk is also checked for any non-standard features. Most viruses are stored in the boot sectors of a bootable Amiga disk; if the disk has a non-standard boot sector, it is either a new form of virus or it is a commercial program (commonly a protected game) which uses the boot block to boot in a special way.

If VirusX finds a boot block it is suspicious about, it will present the user with a requester either warning him that the disk has a virus (of whatever type), or tell him that the boot code is non-standard. In either case, he is given the option to either ignore it, or to remove it by 'installing' the disk. Since this involves writing a new boot sector to the disk, be advised that if you do this to many games, they will no longer run! Care should therefore be exercised, as with all virus killers. If the program gives you the AmigaDOS window before running, you know it is safe to install that disk. The boot code written back to the disk by VirusX is the same boot code that the AmigaDOS INSTALL uses.

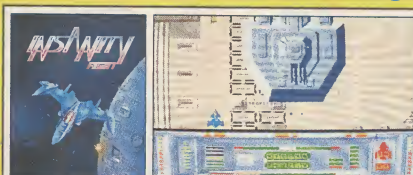
There can be no doubt that every Amiga user should have a copy of VirusX 3.20 or later, and you will find that most PD

continued on page 55

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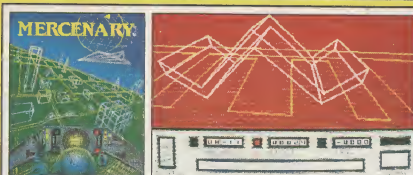
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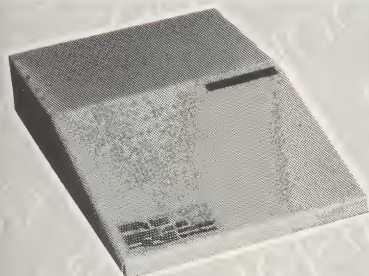
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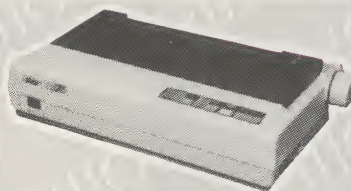
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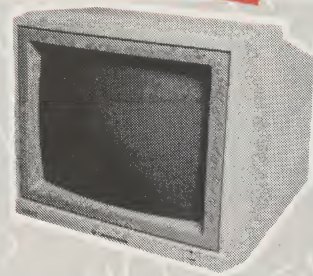
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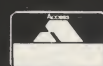
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continued from page 48

libraries, users groups or bulletin boards with Amiga sections should have it by now.

KV (Kill Virus)

The IRQ Virus is one of the latest Amiga Viruses. This is an unusual one, in that it is NOT found in the boot block, but attaches itself to executable programs. It normally attacks the C:DIR command, but it will also look at your startup sequence and attach itself to the first executable program found in this!

"The only way this Virus could possibly spread via modem is through deliberate sabotage, (unless the Sysop actually DID have the program as the first thing in his startup-sequence before sending it to you)."

The only way this Virus could possibly spread via modem is through deliberate sabotage, (unless the Sysop actually DID have the program as the first thing in his startup sequence before sending it to you). The IRQ virus is basically a harmless

joke, and will not kill commercial programs or cause any damage - except to your nerves! All it does is change the title bar of the first CLI window when you boot, and it will try to write to any disk inserted - thus bringing up the "Volume is write protected" requester whenever you insert a write protected disk. Fear not if you have Kickstart 1.3, as this virus will not work in 1.3 - simply giving "Software Error" requesters if you run an infected program.

While VirusX 3.20 will remove IRQ from RAM, and will allow you to repair the first file in the startup-sequence if infected, it will not detect all infected files on a disk - a small program by Dan James called KV or "KillVirus" is needed for this, and this program will check a whole directory's worth of files for IRQ infection. This is a no-frills program and simply gets on with the job. You will often find it included in the same ARChive file as VirusX 3.20, and it is a very useful partner in the war against digital disease!

Guardian 1.2

Guardian 1.2 is the Shareware predecessor of the Guardian 1.3 commercial virus protection system - unlike the average Virus Killer, this program is intended to be installed as a memory resident program which will hang around in the background and inform you if an infected (or non-standard) disk inserted in is inserted into the Amiga, showing the suspect boot

block in ASCII form on screen for you to examine. At this point, you will be offered the option to wipe out the virus by installing the disk in the usual way, and to remove it from memory if it is lurking there at ExecBase.

Interestingly, Guardian shows its presence after initial booting (you include the Guardian command in your Startup-Sequence) by adding its name to the Workbench 'hand' request graphic shown after a reset. Sadly, Guardian 1.2 will not work with Kickstart 1.3, but I understand that the latest commercial version, Guardian 1.3, will work with the latest operating system.

Guardian 1.2 is well worth having as an automatic backup to regular use of VirusX, but of course Kickstart 1.3 and later users will need to purchase the commercial version of Guardian. Fortunately, VirusX 3.20 is suitable for use under the 1.3 environment.

Guardian 1.2 should be found in all the PD libraries, and most Amiga bulletin boards and user groups should have it available.

If you have all three of these programs on your disk, VirusX 3.20, KV and Guardian, you should finally be able to feel safe from all those nasty digital diseases out there! One good word of advice: do not leave it till it is too late - seek them out now!

S.W.

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Amiga C for Beginners

Abacus - Data Becker are continuing to expand their range of Amiga books and the latest addition, *Amiga C for Beginners*, looks likely to enhance their existing reputation still further. The book, which is written by Dirk Schaun, addresses the problem that most C books do not deal with - namely learning about C on a Commodore Amiga computer!

The first two chapters of the book provide the reader with a nice gentle introduction. Differences between compiled and interpreted languages are dealt with and an overview is given of the Amiga environment together with explanations of the relationships between, editors, compilers and linkers.

Chapter 3 shows you how to create your first C program. The example takes you through all the stages involved and includes details of the use of both the Lattice and Aztec compilers. The example provides a step by step account of what needs to be done and even includes tips on what to do if you get any error messages. This is quite simply one of the best 'beginners accounts' that I've seen to date.

In the next three chapters we begin to learn a bit about the C language itself - functions, statements, printing text, adding numbers etc., are all covered, as is the use of program loops and conditional testing. All of the topics dealt with will be familiar to anyone with any Basic experience and each topic is dealt with in a way which will make most readers feel very comfortable. The aim is to provide a grasp of the essentials needed so that you can actually do some programming without becoming either disheartened or overwhelmed by being presented with too much technical information too soon. The approach works and these early chapters provide an easy to read 'introductory C tutorial' containing useful examples and lots of help.

Chapters 8 and 9 contain the first real signs that you are no longer working with a beginners language. Chapter 8 introduces the concept of a 'data type' and the ideas behind 'type conversion' using the 'cast' operator (this enables a C programmer to force data-type reassessments when necessary).

By the time you have read this far it is likely that you will have already written and compiled quite a few of the simple examples provided. Out of necessity the next few chapters deal with areas of C which will be less familiar to a lot of readers.

C's pre-processor facilities and the use of #define and #include directives are dealt with together with the somewhat odd shorthand syntax that the C language allows. Additional short chapters explain parameter passing to C functions, arrays, pointers, storage classes etc.

The last chapters of the book deal with such things as complex data types, arrays of pointers, declarations and library macros.

This is more the type of stuff you get in the standard C books but it is quite well presented for the beginner and the material is always explained in context. The beginner will have trouble with these topics, but Dirk Schaun tries hard to avoid cluttered explanations - he avoids delving too deeply into these particular areas and this is as it should be for a book of this nature.

Towards the very end of the book there are more Amiga tips. CLI and non CLI window input/output is dealt with together with notes about the differences between WorkBench and CLI based programs.

There are some details about Intuition programming and example programs for opening screens/ windows etc. The author makes a point of mentioning that the Amiga's Intuition interface is very complex and that because of this it is only possible to provide some introductory guidelines. Nevertheless the few example programs which are dealt with provide useful starting points for further study and are well worth looking at in detail.

I don't think you learn about C or the Amiga from any one book, so I wouldn't suggest this is the only book you'll need to learn C on the Amiga. I do think however that this is one of the best books I have come across recently and wouldn't hesitate to recommend it - it is a book that you can both learn from and enjoy reading. The author does not treat the reader as an idiot and you can tell from the way that it has been written that he is both interested and competent in the areas that he is writing about. Although the book is aimed at the beginner it is worth mentioning that the last few chapters are actually well worth reading by anyone who is working with the Amiga - and that includes competent C programmers as well!

Suggested Retail Price \$19.95

The examples within the book are available separately on an optional program diskette.

'Learning to Program in C' by N. Kantaris

This is one of the 'Bernard Babani' range of computer books. It is a fairly short, but quite useful, introduction into the world of C programming which covers all of the topic areas that are of interest to a beginner. It is not aimed at Amiga users as such but it does nevertheless provide a concise and well priced introduction to the subject.

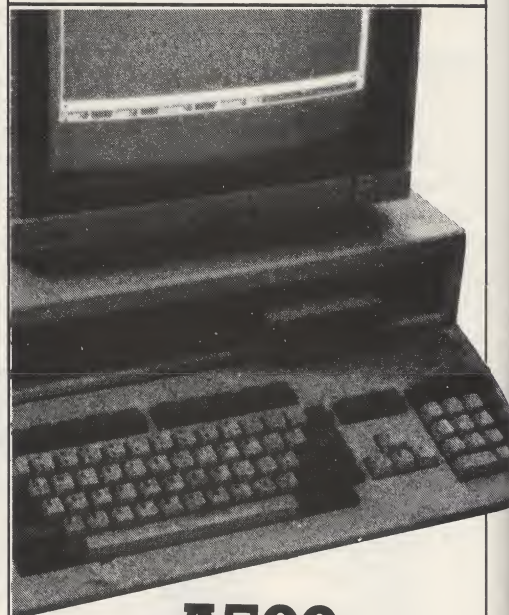
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P.A.O.



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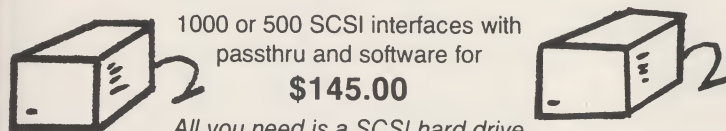
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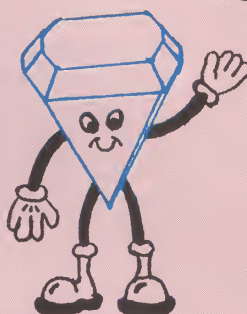
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Amiga Answers

Yuri Large tracks down the tips that keep you on top!

Dear AUI,

I hope to buy an Amiga in the near future but have a few unanswered questions and would be grateful if you could help. My "fears" stem from the last computer system I bought being superseded a few months later, with no upgrade path available. Though they really should be sent to Commodore UK I think you are a much better bet for some straight answers, so here are the questions:

1. When will the Enhanced Chip Set (ECS) be released?
2. Will you be able to plug the ECS into the existing B2000s and make use of the extra chip RAM and graphics modes which they should provide?
3. Which Amigas will be able to use 2Mb of chip RAM with ECS and which only 1Mb?
4. When will the Amiga 2500 be available and what is the likely cost of its minimum configuration?
5. Is there any chance that the Amiga 2000 is still being shipped with a 0.5Mb RAM card in its CPU slot?

Thank you for your time.

Yours sincerely,

Alex Silva, London

Dear Alex,

1. Kickstart and Workbench 1.4 will be required to use ECS. Therefore, I would suggest that it will probably not be available to us poor end-users until the middle of next year.
2. It will be possible to upgrade all A500's and B2000's to use ECS.
3. ECS will only provide 1Mb of chip RAM no matter which model of Amiga you use it with.
4. The Amiga 2500 is in fact a B2000 with additional boards added. There will be two versions. One the Amiga 2500AT will be a B2000 with A2620 co-processor board and A2286 AT-bridgeboard added. The other, the Amiga 2500UX, will be a B2000 with A2620 co-processor board, a hard disk and Amix, Commodore's version of Unix for the Amiga. I believe, they have just commenced shipping in the State, so I expect to see them in the UK sometime before the end of this year.
5. The Amiga 2000 with the RAM board in

the CPU slot, is in fact the notorious "A2000". This particular model is no longer sold by Commodore registered dealers.

One overall point I would like to make, is that if you are worried about the Amiga you buy being superseded make sure you go for the Amiga 2000. This is a safe bet as, according to Commodore's plans for the next two years at least, the 2000 is the basic building block for all new developments

Dear AUI,

Some months ago I purchased my second Amiga, complete with the usual heavy power pack. Yesterday I discovered that somehow somebody had managed to get into my offices and swap my power pack for what appears to be a brand new lightweight version.

The new power pack appears to work perfectly, which leaves me extremely puzzled! Could you kindly let me know if there is any major (or even minor) difference between the new lighter packs and the older models? I am completely baffled as to why anyone would want to swap the powerpacks. Please shed some light on this mystery! I thank you in anticipation. By the way, this happened BEFORE April Fool's Day!

Thanks!

J. Thwaites, Norwich

Dear Mr. Thwaites,

You are right. Commodore have indeed changed the design of their power supply for the A500. When they initially did this they did have some teething problems. Thus, the newer light PSU's have come to have a certain stigma attached to them. Now, I am pleased to say, Commodore assure me and over the last few months the new PSU's have proved to me that they are just, if not more reliable, than their somewhat overweight predecessors.

Dear AUI,

I am relatively new to the world of personal computers and recently I have found the need to purchase a quality home computer; the Commodore Amiga and Atari ST being the two that strike me as the main contenders.

My need is for a computer to use as a word

processor and desk top publisher. Programming takes second place and I am not interested in the games software available (although I might purchase some). I, obviously, will be requiring a printer, but as I won't be able to afford a colour printer, the coloured graphics are not that important to me. I may well be taking up music and a reasonable sound output would be desirable. I will mainly be using the computer for college accounts work so spreadsheets, document collation and printing will be my main uses. This leads me onto software: are Wordperfect 5 and Supercalc 4 recommended and what desk top package would be recommended?

For printing I cannot afford a 24 pin dot-matrix, so I will be aiming for a 9 pin with NLQ. Speed and noise are not important to me, only NLQ/LQ, graphics capability, a couple of fonts and single/multiple A4 sheet feeding. The Panasonic KXP 1081 and Citizen 120D look, from magazines, to be reasonable.

My problem is that I am working in Central America and cannot get any hands on experience of these computers and printers, so I have been advised to write to you as a trustworthy and reputable source of information. I have a 500 pounds limit and I am trying to decide between the Amiga and ST with a good compatible printer; could you please advise me on this matter?

I would be extremely grateful for any advice you can offer me and any direction you can point me in.

Yours inquiringly,

Nigel Singer, Belize

Dear Nigel,

When it comes to choosing between the Amiga and the ST there are a few things to point out in the Amiga's favour:

(i) The Amiga with its three co-processors is far more than a 68000 powered computer. The co-processors in conjunction with the clever operating system allow the Amiga to multi-task. It is still the only home computer on the market that will allow this.

(ii) The Amiga has excellent graphics, with a palette of 4096 colours to choose from and a maximum resolution of 640 x 512 some stunning graphics can be created. This, as well as the fact that the Amiga can overscan. That is it can address the borders of the screen. So, if you want to go on to use your Amiga for video-titling this may sway your choice.

(iii) The Amiga also features four channel stereo sound. The sound's created rival those of many synthesizers.

That's the basis on which the Amiga makes it possible!

For DTP and word-processing the Amiga is well qualified. There are some excellent packages that take full advantage of all the Amiga's facilities. One package in particular, Publishers' Choice, would supply excellent DTP and WP software for you. It used to be said that the Amiga could not

continued on page 64

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Amiga Answers

continued from page 62

be used for business, but now the software is available for all the usual business applications it is a fine choice. In fact, Word Perfect 4.1 is available on the Amiga, on the other hand SuperCalc 4 is not. However, there are other good spreadsheet packages available for the Amiga, in particular the MaxiPlan range from Oxxi Software.

On the printers front, the Panasonic and Citizen printers are both good reliable printers. However, for a little extra you could go for one of the Star LC10 range. These printers offer some excellent facilities, such as paper-parking and 3 different NLQ fonts. The black and white version costs about 200 pounds and the colour version is surprisingly reasonable at 250 pounds.

Dear AUI,

Perhaps you would be kind enough to tell me if you are aware of any support groups which exists for novice Amiga users, i.e. someone willing to take on correspondence and answer questions.

I look forward to your reply.

Yours sincerely,

J. R. Beasley, London

Dear Mr. Beasley,

There are two groups that I would suggest that you contact.

Firstly, there is the UK Amiga Users' Group who I represent. You can contact the UKAUG at 66 London Road, Leicester LE2 0QD or telephone 0533-550993.

Secondly in the London area, there is a new regional user group called the Amiga Meditators. They can be contacted on 01-377 1358.

Dear AUI,

I have been seriously considering the purchase of an Amiga 500 for the past couple of months, although my resolve has taken a serious jolt following the letter in your April issue concerning V1.3 and the fact that some Amiga games will not run on it. How prevalent is this problem? With some games costing 30 pounds plus, this is a lot of money to throw away on something that might not work.

I suppose the answer is to make sure that I don't buy the V1.3 version, but will games programmed for V1.3 work on earlier versions?

This situation can hardly enhance sales of the Amiga and I hope you can throw some more light on the subject since I intend holding on to my money for the time being;

the alternative being to buy a different computer!

Yours faithfully,

S. J. Brophy, Horsham

Dear Mr. Brophy,

As I mentioned in the April issue, this problem occurs when programmers break Commodore's guide lines for addressing the Amiga's system functions. If they could stick to these guidelines then the problems would never occur. However, recently Commodore have stated that in their opinion the problem is not down to the difference in ROM, but can be explained by the different types of drive they have used in the Amiga. I'm not sure this is 100% true!

This problem will always exist while programmers look to speed up their programs by breaking the rules, and I agree with you when you say it cannot do anything to enhance the Amiga's reputation.

To be fair though, I would say that this problem effects fewer than 10% of games. With all the publicity surrounding this, I would not be surprised if programmers do take heed as this problem will also effect their sales. So, come on guys and gals, stick to the rules!

Buying a 1.2 machine will not necessarily be the answer, as in the near future programmers will be working for 1.3 machines and the problem will be reversed; 1.3 games may not work on 1.2.

What I would suggest is that if you buy your games from a good dealer they will be happy to try them for you, as of course most showrooms will be stocked with current stock utilising 1.3.

Dear AUI,

I would like to ask your "Amiga Answers" person if there is any publication available that fully and plainly shows the CLI and AmigaDOS commands. At the moment I have the two manuals which came with the Amiga 500, also the Bantam manual and "Tips and Hints". While these give individual commands they do not show the command sequences necessary to get into the "Devices" or the "Startup-sequence", for example. When trying to install a new printer driver I found the going very hard; fortunately, when installing extra memory and setting up the clock and date, I found a magazine article which took me through the process step by step and wondered why the manuals were not written like that!

I live some 50 miles and a ferry crossing from the nearest town and your publication gives me assistance which is not available locally. Please advise me if you know of any publication which would help me as the Amiga is proving to be a difficult machine to get friendly with!

With best wishes for continued success.

Yours faithfully,

R. T. Salter, New Zealand

Dear Mr. Salter,

My favourite book on the subject, which covers it in plain English, is published by Compute! and is titled the "AmigaDOS Reference Guide". It costs about 15 pounds. At present, it covers Workbench 1.2 and not 1.3. However, its style is perfectly suited to the beginner.

If you want a book that covers 1.3 as well, then I would recommend Abacus's "AmigaDOS Inside and Out".

Dear AUI,

I have the following questions for you:

1. Please advise me on which disk drives work with all three C64, C128 and Amiga computers.
2. Please tell me which printers work with all three computers.
3. Are all the Amigas compatible with each other?
4. What is the maximum size of the Amiga's RAM?
5. Where can I buy books about Basic programming and machine language?
6. How many pixels has the Amiga in multicolour mode?

Thank you in advance and kind Commodore regards.

Kim Sundkvist, Finland

Dear Kim,

1. There is no disk drive that works with all three of the computers you mentioned. The 1541-II will work with both the C64 and C128 using the Commodore serial interface. However, the Amiga cannot directly address Commodore serial. Likewise, the C64 and C128 cannot use Amiga disk drives.

There is one partial solution in a product called Access 64.

This allows the use of Commodore serial devices, such as the 1541-II, with the Amiga. However as it costs almost as much as an Amiga drive, I would probably recommend that you bought one type of each drive.

2. Commodore have just brought out an excellent printer that can be used on both Commodore serial for the C64 and C128, and parallel for the Amiga. It is called the MPS1230 and costs about 150 pounds.

3. The Amiga's are all fully software compatible. However, they do use different peripherals. That is, a RAM board for the Amiga 2000 will not work directly with either the A500 or A1000.

4. The limit on the Amiga's RAM is imposed by the operating system and is 9Mb. However, in future release of the operating system, this may will be increased.

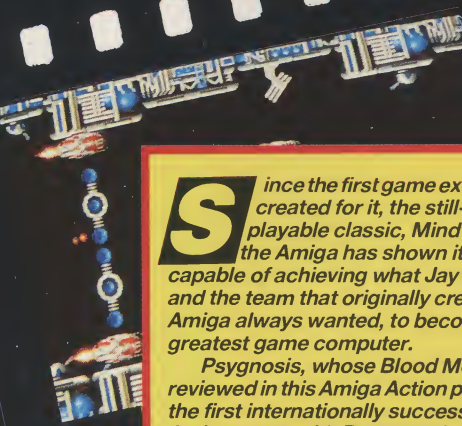
5. You should be able to buy books from almost any Commodore dealer. Look out for publications by both Compute! and Abacus.

6. The Amiga's maximum resolution is 640 x 512. This gives a total of 327,680 pixels.

AMIGA ACTION

AN AUI ENTERTAINMENT SPECIAL

**THERE'LL BE A HOT TIME
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TONITE!**



**... BUT YOU
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NOTHIN' YET!!**

Since the first game exclusively created for it, the still-highly playable classic, *Mindwalker*, the Amiga has shown it was capable of achieving what Jay Miner and the team that originally created the Amiga always wanted, to become the greatest game computer.

Psygnosis, whose *Blood Money* is reviewed in this Amiga Action produced the first internationally successful Amiga game with *Brattacus* but then Amiga games were few and mostly clumsy.

That all changed with Cinemaware's now legendary *Defender of the Crown*, which the then MD of CBM UK said sold more Amigas in the UK than anything else - including *Deluxe Paint*.

The first real quality arcade style game was the award-winning *Xenon*, whose second version is about to appear.

Now we have brilliantly creative games like *Rocket Ranger*, *Starglider II* and *Populous*; games that not only require huge investment of time and

money and creativity but that can also satisfy an audience of game players considerably older and more demanding than 12 year old 8-bit budgeteers.

As the level of quality rises on the Amiga, so the standard of the best is accepted what every game must reach. So the action on the Amiga gets better and better.

When the Amiga was created in Los Gatos, California by Jay Miner, Dave Morse, R.J. Mical, Dale Luck and the rest of that team of genius, they dreamed of a games machine par excellence. For games read *Action*. The dream has come true. But in the words used by another recent world-renowned Californian, "You ain't seen nothin' yet!" So we thought it time to focus on the Amiga's accelerating climb to the top of the home computer entertainment world with an Amiga Games Special. Introducing the *Top of the Heap*, the *King of the Hill*, the *Numero Uno* in Home Computer Entertainment - AMIGA ACTION!!!



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It Takes Two ...

The creators of the *Rising Sun* promised that it would appeal to hardcore gamers as well as adventure minded types. AUI's seasoned staffer Tony Horgan and adventure expert Andy Moss reviewed Cinemaware's latest from both angles.

The sun shone through the slatted windows of the pagoda reflecting brilliantly on the blade of the young warrior who sat there contemplating his future. Opposite him, his brother, a master tactician famed throughout Japan was similarly deep in thought surrounded by the tools of his trade, maps, strategies, information on army generals etc. The two of them sat across from each other knowing only one thing, the death of their father was to be avenged, that was certain, but how to succeed at this task was the problem that befell the brothers.

Hours later the sun, now a fiery red ball, sank slowly in the eastern sky and brought long shadows creeping into the room, the tea had gone cold long before now and the rice in the bowls remained untouched. Finally Yoshitsune and Yoritomo rose, bowed, and embraced each other sealing their plan and signalling the return of the Minamoto clan together again with only one aim, the destruction of the Taira, the powerful army clan who were responsible for the death of their father Yoshitomo. The rivers were destined to run red with the blood of the Taira, their temples and castles destroyed, their very name erased from Japanese history.

Computer games based around far-eastern history and martial arts have usually delved no deeper in the culture than a Bruce Lee film. Not necessarily a bad thing, but for a totally different approach, how about combining all the key features of a quest to become Shogun of twelfth century Japan?

From the grounds of your home castle, you can choose to enter your council room (of little use at the start of the game), or begin your conquest. From a map of the country you can plan out your moves. Paths connecting castles, monasteries and towns are shown on the map, with colour coded banners representing the armies of your enemies. Dragging your chosen army to an adjacent location sets it off on its way. Unlike *Defender of the Crown*, in which



you could just hop across a territory border with the date clocking on accordingly, Lords of the Rising Sun forces you to sit and twiddle your thumbs as your troops inch their way along the route. Pressing "A" speeds it all up a touch, but even then it seems to take forever for something to happen.

If you meet another army on the way you could

"Give chase on horseback, chop up enough soldiers along the way and you get a shot at the general."

attempt to form an alliance, or if you feel aggressive you could always go into battle. Commanding your archers and swordsmen from an ariel viewpoint, you get to decide when to advance and when to retreat. If you are skillful enough to force the enemy into retreat, you could try to finish off their general.



can find yourself the target of an identical attack. Similarly in another break from the strategy, you could be called upon to defend your own castle from invaders.

Cinemaware's characteristic movie-style pre-

Lords of the Rising Sun

Cinemaware



Hire Ninja to Assassinate Mori

Give chase on horseback, chop up enough soldiers along the way and you get a shot at the general.

To become Shogun you must gain control of every castle in the country. Laying siege to a castle calls for another of the arcade mini-games. This time, your goal is the Keep and its main guard. This Gauntlet clone is mouse controlled, making use of both buttons for swordplay and shooting arrows. Sadly the mouse is far from the ideal control method, which combined with the slow scrolling, spoils what could have been a very enjoyable little sub-game.

While you are out dealing death to your adversaries, they are also plotting your demise. Just as you can hire a ninja to assassinate an enemy leader, you

sentation has been played down since Rocket Ranger. Inter-scene graphics and narratives are in no short supply, and the game disks are referred to as "reel one" and "reel two", but the credits, intros and the rest play a smaller part. The game format is typical of the series; a power race with a colonisation theme, a strategic core surrounded by arcade-like sub-sections. That one other Cinemaware hallmark is also present: diskswapping. For single drive systems (which in this case means all 512K machines) there is an awful lot of it.

Lords of the Rising Sun is a slick game. However, it does come as a slight disappointment after the amazing Rocket Ranger. The problem I mentioned about the long waits on the map screen is no minor one. It may be more realistic, but if it is all for realism, why not include a long pause to simulate the army sleeping at night? Because it would be extremely boring, that's why! That, and the diskswapping are the game's only notable faults, but it is a shame they can dilute the players interest to such a degree. Playtest it yourself if at all possible. You may hate it, but you might just love it.

T.H.

AFTER NEARLY A YEAR IN THE MAKING, CINEMWARE'S LORDS OF THE RISING SUN IS READY. ANDY MOSS PUTS OWN SHOGUN ASKS 'IS IT FULL OF EASTERN PROMISE?'

cont. on next page

continued from page 67

Cinemaware's latest epic, *Lords Of The Rising Sun*, has been heralded as a sort of *Defender Of The Crown* part II by certain parties, but this is far from the truth. One could argue that there are elements of *Defender* in that progress is depicted on a map, and territories have to be won and a princess has to be

"Rising Sun is a complicated mix of strategy war game and adventure that is interspersed with arcade action sequences that have become the hallmark of Cinemaware."

rescued, but it is there that similarities end. *Rising Sun* is a complicated mix of strategy war game and adventure that is interspersed with arcade action sequences that have become the hallmark of Cinemaware.

At the start you get to choose which brother you want to become, Yoshitsune is the warrior, master swordsman and genius on the battlefield. Some have said he learned his craft from wood goblins and as a result has mastered superhuman qualities. As Yoritomo you are the master politician and strategist. Your political affluence will gain you the support of many allies however, as your brother wins you many battles it also gives him political clout and that may prove to be not in your best interests later. The two faces appear on screen at the beginning and by sliding the mouse to one or the other, the character is highlighted by the opening of his eyes, a nice touch. As the warrior character, you play no part in the battle sequences due to your superior skills (although you can if you wish) so select Yoshitsune if it is strategy that you want.

You then appear inside your home where there are a number of options to ponder. Your banner and those of the major generals are depicted, along with three shiriken (throwing stars) which represent the number of Ninja assassins you have available for hire. The better general you are the more likely your assassins will succeed. However if they do not, there is a sword graphic, and this is for you to commit seppuku (ritual suicide) which is



mandatory for failure.

There are a host of options available to you plan your campaign and review your troops. You may see the current status in your army, after which you can take cities by force, direct battles, move the men around as they fight, and best of all defend your home castles. This sequence gives you a view through one of your battlement walls showing you holding a bow and arrow. You point it at the hordes climbing over your outer walls and try to pick off the soldiers. Hitting one, you hear a scream and he drops where he's hit, never to move again; consequently if you are a good shot you could be left with bodies littered all over the place.

When you seige a castle, you get the chance to hack and slay your way Gauntlet style through the maze of the castles interior. There is a kidnapped princess in one of the castles (this changes each time you play) and rescuing her in true Cinemaware fashion brings you many rewards.

If you capture all 19 castles, you win the game and become Shogun, if you fail you will attain one of 25 possible ratings depending on your performance.

So what does all this add up to? There is no doubting Cinemaware's attention to detail, the beautifully implemented original music score, the sensational graphics and even a save game option (which has never been a feature in their games before). But I for one feel that Bob Jacobs in trying to create a game of epic proportions has included so much that there is no feel to the game as in say *Rocket Ranger* or *King of Chicago*. Cinemaware's games were always pick up and play and enjoy regardless if you win or lose, *RISING SUN* is so complicated and involved I fear it will only appeal to dedicated wargamers and not the mass market that they have built their name on. *RISING SUN* could have been fun, instead it is a long drawn out war game that is too serious by far. Sorry Bob, as one of your greatest fans I say go back to the *Rocket Ranger* approach.

A.M.

Graphics: 9
Sound: 8
Playability: 7
Value: 7
Price: £24.95

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32-page A4 bi-monthly glossy magazine

Confidential is written for people who take their fun seriously. If you are into Adventure, Strategy, FRPs, MUGs, PBMs, D&Ds, or if you would simply like to see more from behind the scenes then Confidential is essential reading. Regular features include Personnel File, Dead Letters, The Man in Black, Feature Articles, Brain Teasers, Diary, News, Competitions, and The Boss Upstairs. Club participation is welcomed.

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Myth was rated at 90% by Keith Campbell of Commodore User.
He said "Don't be put off by it being a mini-adventure.... text undreamed of in those bygone days."

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With Emperor Bios laying waste to the Earth and mankind, the rage of the people's minds was so great that it created two super-human warriors to combat their oppressor. These two instinctively set out to destroy Bios, his three demi-gods and the pawns of the battle, the aliens.

That wildly imaginative plot should give you some idea of the level of originality found in Forgiven Worlds. Veteran scenario decoders will have figured out that the game is a one or (simultaneous) two player scrolling shoot 'em up. Originality is not everything though, and Forgiven Worlds makes up for that deficiency in other areas.

"You still get the 16-way firing ability with the Amiga version, but a slight compromise has been made."

The devastation of the attack from Bios has apparently nullified the effects of gravity, or condensed the atmosphere to such an extent that effortless flight is a possibility for the wingless warriors and most of the aliens which arrive from every direction. To counter this, the coin-op gave you an Ikari Warriors-style rotatable joystick. You still get the 16-way firing ability with the Amiga version, but a slight compromise has been made. Holding down the fire button whilst moving across the screen rotates the player. That means that once you get the right angle you can only move up and down whilst firing. It works well enough when there is little going on, but as things hot up you tend to find yourself one step behind the enemy; as soon as you line up with one bunch of aliens, they disappear and another lot ram you from behind!

More danger comes from the ground, where lizards work levers to send missiles shooting towards you, others on swivel-chairs man the guns, and yet more kneel as if in prayer before launching more missiles from backpacks. Frozen zombies rising from the snows and robotic spiders keep the pressure on in later levels.

Both heros begin with a moderately effective machine gun. As the aliens die, some leave behind pearly tokens, called zennies, which can be spent in the mid-level shops. Some of the weapons up for sale come in the form of satellites which stick close by, letting off their missiles, napalm bombs or whatever as you fire. Information about the end of level guardian's weaknesses can be bought, along with medical supplies to boost your strength. You can also get hold of a shield, which instead of causing the player to glow as in most games, actually attaches a suit of armour to the sprite. Shops only appear once in each level and prices are high, so you will be lucky if you can afford both a weapon upgrade and an energy top-up.



US Gold

FORGOTTEN WORLDS



"There is no speech in the game itself, but you do get a yell every time you get hit."

A lot of the coin-op's frills have been included. Screen-size portraits of the two hunks appear before the first level. I presume the speech was sampled from the coin-op itself, as you need to crank the volume right up to hear it at all. Still, it is better than nothing. Further graphics pop up between each level with more sampled speech. There is no speech in the game itself, but you do get a yell every time you get hit. The rest of the sound effects are good but could do with some more variety. As with most shoot 'em ups, selecting to play with the music instead is not advisable.

"The stunning graphics, not least the guardians, are a good enough incentive to keep you at it."

Take it from someone who has played the finished product (not just a pre-production disk with infinite energy), *Forgotten Worlds* is hard. Each of the collision take only a slight toll on your vitality, but are so frequent that it soon withers down to nothing. A possible reason for this is that there are only four levels in the game. Difficult as it is, *Forgotten Worlds* is still highly playable. The stunning graphics, not least the guardians, are a good enough incentive to keep you at it. A choice of control modes and a couple more levels would have finished it off perfectly, but *Forgotten Worlds* is an obvious choice for players of the coin-op, and a serious contender for everyone else's cash.

T.H.



Graphics: 9
Sound: 7
Playability: 8
Value: 7
Price: £19.99

I think it was about two years ago that I first saw Gunship, running on a Commodore 64. The following weekend saw me down at my local shopping centre eagerly searching out my own copy.

When I "graduated" to an Amiga, and my trusty old 64 was consigned to the top shelf of the cupboard, I was disappointed to find that Gunship was unavailable for my new wondermachine. Imagine my delight then, when I was asked to review it for AUI.

"Gunship" is a simulation of a Hughes AH-64A Apache close ground support helicopter. The aim is to first master the art of flying a helicopter, then to undertake a series of missions, against increasingly skilled enemies.

"It is not just a case of 'load up and go'; a good deal of thought is needed to be successful."

There are five different missions (in order of difficulty): Training in the USA, Southeast Asia, Central America, Middle East and Western Europe. Each scenario offers different needs and requirements in terms of what weaponry to load your helicopter with and how to actually fly the mission.

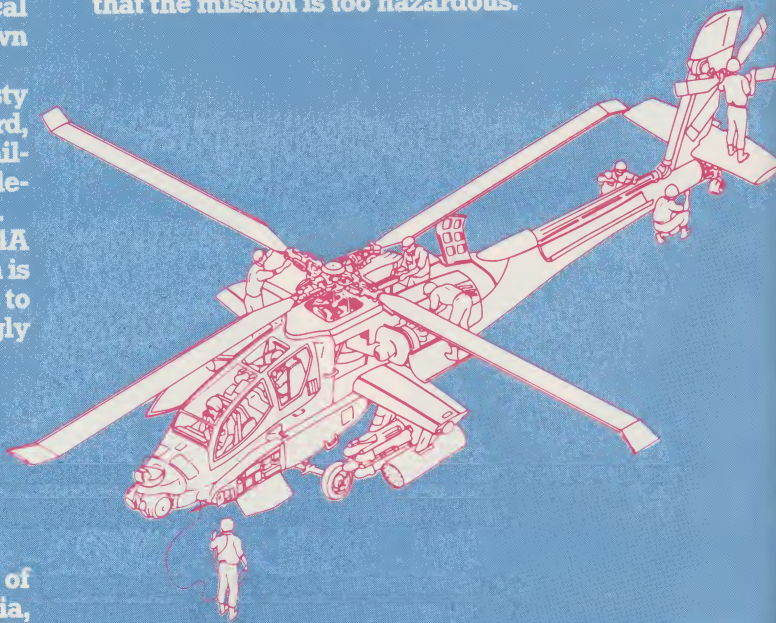
It is not just a case of "load up and go"; a good deal of thought is needed to be successful.

In Gunship, success is rewarded by promotion. You will start as a Sergeant and, if you complete your training successfully, you will be promoted to active duty as a Warrant Officer. As your "career" develops, your rank will improve a further six levels, to Colonel. As in real-life combat, exceptional performance, heroism or bravery is rewarded with some form of Honour, from the Commendation Medal right up to America's highest military award, the Congressional Medal of Honour.



Before you actually get to fly in Gunship, there are a number of screens to work through, detailing some important aspects that need to be defined. These include which pilot (choice of eight) is going to fly and which mission he (or she) will undertake, the level of danger, enemy ability and overall reality of the simulation. Then follows your flight briefing, a look at the map of the sector in which you will be

flying, an intelligence report on the area and the opportunity to go on "Sick Call" should you decide that the mission is too hazardous.



"The very comprehensive instrument display contains a total of 39 different indicators, dials and gauges, most of which will require a fair amount of attention throughout your flight."

When you accept the mission, all that is left to do is to arm your helicopter to suit your mission, not forgetting to add defensive flares and chaff, whilst carrying enough fuel and without overloading. Once loading is complete, a click on "Continue" will find you sitting "in" your Gunship ready to start your mission. The very comprehensive instrument display contains a total of 39 different indicators, dials and gauges, most of which will require a fair amount of attention throughout your flight. There is also 40

AH-64A APACHE SPECIFICATIONS

Overall length: 58'2"

Overall Width: 48'0"

Overall Height: 15'3"

Weight Empty: 10,268 pounds

Engines: two T-700-GE-701 turboshaft jets

Nominal Engine SHP: 1,649 per engine

Maximum Engine SHP: 1,896.4 (running on one engine)

Rotor speed: 280 RPM

Fuel Capacity: 376 gallons

Maximum Horizontal Airspeed: 162 knots (184 mph)

VDL "never exceed" Maximum Airspeed: 197 knots (224 mph)

Rated Maximum Climb: 2,880 feet per minute

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Avionics: VHF, UHF, IFF, PNVIS, TADS, DASE, Doppler Nav.

Maximum AGM-114A Hellfires: 16

Maximum 2.75" FFAR Rockets four 19-rocket pods (76 total)

Maximum 30mm Rounds: 1200 rounds

Maximum AIM-9L Sidewinders: 6 missiles

Maximum FIM-92A Stingers: 6 missiles

Production Cost in 1986 dollars: \$7.3 Million each

Amortized R&D Cost in 1986 dollars: \$1.1 Million each

different keyboard flight and combat controls although many of these can be replaced if either a joystick or mouse is used.

The "view" through the windscreen is shown in full colour, with solid 3D buildings and topography, for both day and night missions. A full sector map is provided and, when selected, replaces the cockpit view. On this map will be shown all the known positions of both friendly and enemy troops, equipment and bases, as well as your position and selected mission targets.

A "standard" mission is to destroy designated, Primary and Secondary targets, whilst disrupting the enemy wherever possible, before returning to a friendly base. Flying a helicopter is somewhat different to any other type of aircraft, in that as well as

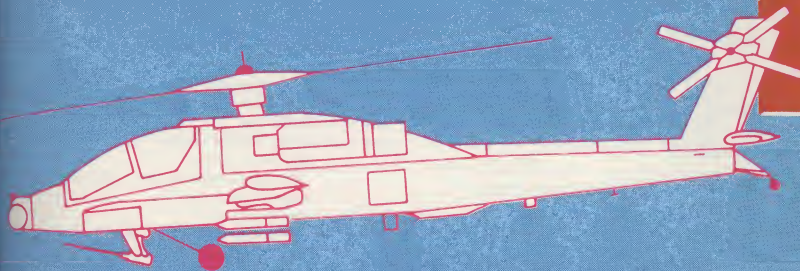
vertical and horizontal flight, a helicopter can fly backwards and sideways!

A large cross-hair, in the centre of the wind-screen, is used to display the direction in which the control (joystick, mouse, keyboard) is being moved, the relevant arm turning from white to black as movements are made.

As I mentioned earlier, I played Gunship quite extensively on the 64. When I first loaded the Amiga version I was suprised to find that it looked absolutely identical to the 8-bit version. OK, the Amiga version has an animated intro screen with military-type music but, to be perfectly frank, I was not overly impressed with either. Don't get me wrong though, this is NOT just a simple copy of an earlier program, adapted to sell in the 16-bit market. Microprose have obviously made a concious decision to take advantage of the superior machine's capabilities, whilst staying as close to the original as possible. If this is the case, they have succeeded. Although Gunship on the Amiga looks the same at first glance, it is when you start playing that you realise the difference; it feels and plays so realistically.

Gunship is a terrific program (I hesitate to call it a game), that will keep any aspiring helicopter pilot entertained for many, many hours.

N.S.



GUNSHIP

Microprose

Graphics: 75%
Sound: 65%
Playability: 90%
Overall: 80%
Price: £24.95



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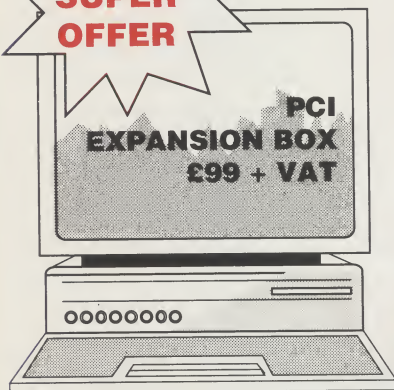
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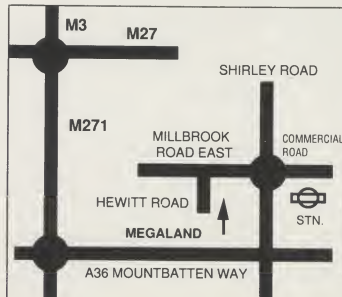
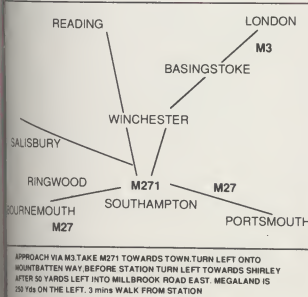
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MOUNTBATTEN WAY BEFORE STATION TURN LEFT TOWARDS SHIRLEY
AFTER 50 YARDS LEFT INTO MILLBROOK ROAD EAST MEGALAND IS
70 YDS ON THE LEFT 3 mins WALK FROM STATION

Journey

Infocom



Bergon cast a knowing eye over his new, hardy yet inexperienced party, and sighed deeply. These were all couragous volunteers, even that apprentice food merchant fellow Tag, the one who was to keep a note of their travels, and not one of them had shown even the slightest hint of reservation. Indeed quite the contrary, they were all excited about their adventures to come.

Winter was fast approaching though, and Bergon knew what that would mean, he hoped with everything in his heart that the weather would hold for the trip to Sunrise mountain, the first stage of their quest to put their world back to rights. 'Come comrades', he said, 'let us be on our way, and may the gods watch over us'. With that he stood, and walked purposefully out of the inn and onto the road that led to Lavos.....

Once in a while there comes a time in a reviewers life where everything appears smelling like roses. The world is suddenly a better place, and I walk around with a smile on my face. JOURNEY has done that for me, it is a wonderful piece of software that captivates you from the start and does not let go.

JOURNEY is written in true Tolkenien style, using the now familiar 'the land is in turmoil, crops are blighted, disease and famine ravage the once properous people, and evil has fallen over the land' type scenario. The only hope for the people is to find the geat wiz Astrix (Gandalf?) and convince him to return from his solitude and lend his help.

A party is assembled comprising some four hardy souls including Tag, (Bilbo?), an apprentice

food merchant who has agreed to not only act as provisions manager but also keep a diary of the journey, hence the words that you see after each action that you decide to take. Tag can be changed for your own name if you wish, but you may find yourself making derogatory comments about yourself, if you see what I mean.

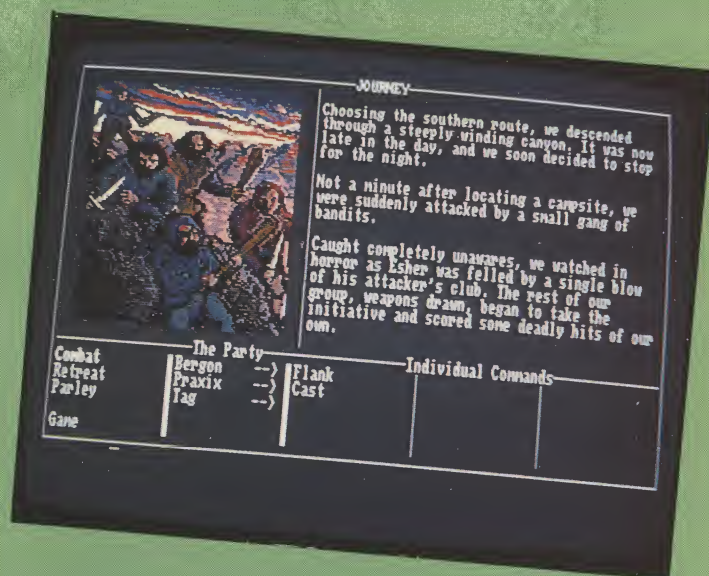
"I suppose the system is similar to the Level 9 'Adrian Mole' games, but overall is much, much slicker and much more polished."

Bilbo Baggins, I presume?

Magic and fantasy themes have always played a large part in adventure games. The Hobbit, by J.R.R. Tolkien, was one of the first smashing best sellers to open the world of fantasy for thousands of readers – even entire cultures. Penned by Mark Blank, creator of Zork and Enchanter, Journey is a different type of adventure than those with which you have been accustomed. Written in a style that sees the story presented actually through one of the characters eyes, the tale unfolds before you and the challenge is to decide which path to take, or where to explore, and what actions to take where. I suppose the system is similar to the Level 9 'Adrian Mole' games, but overall is much, much slicker and much more polished.

"There are great many puzzles in the game, which are not the solve or die variety, but the 'solve this and it will help you later' type."

Actions are simple, all you do is highlight the word you want to use, which at the beginning will be either PROCEED or ENTER (the shop), after that, other action words will appear depending on how the story progresses. Any action you take, will advance the story towards one of its many endings,



but there is only one ending that is the best, the destruction of the Dread Lord (Sauron?).

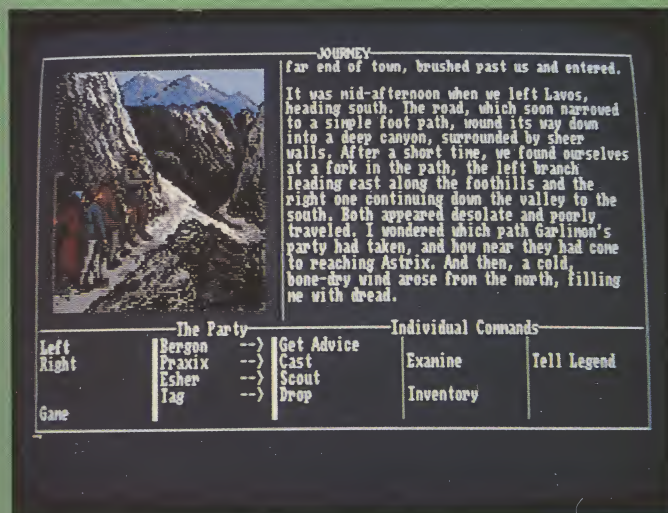
There are a great many puzzles in the game, which are not the solve or die variety, but the 'solve this and it will help you later' type. If you do get frustrated, and end the session, you can call up a 'Tags musings' file, which uses hindsight to give you clues as to what you should have done like 'maybe looking back we should have explored further up stream' etc. There is a save game option, but Infocom urge you not to use it too often. Just enjoy the game and see the consequences of your actions whatever the outcome.

The graphics are very pretty, and convey the style and atmosphere perfectly. You cannot help but feel you are reading a novel, and are drawn right into the story itself. The characters take on real personalities, and yes, you do become attached to them. There are times when the story just runs on its own without any decisions to make, but the prose is crafted so well, that its just a pleasure to read it.

The puzzles gently become tougher from a rather benign opening, and you start to realise that like Lord Of The Rings from which Journey has obviously been related, magic will play a significant part in the proceedings. For pure entertainment, Journey is a classic of the genre, so good I think, that Marc Blank should take up where Tolkien left off and treat us to some more adventures of Tag, Bergon and all.

Quite simply, an essential purchase for any Amiga owner in search of software to entertain.

A.M.



**Graphics: 10
Sound: 10
Playability: 10
Value: 10
Price: \$49.95 (U.S.)
£24.95**

AIRBALL *Microdeal*

If the name Airball rings a bell you have probably seen a copy or two on the ST software shelves. Isometric 3D arcade adventures were old hat at the time of its ST release, but even now there have been very few of these on the 16-bit machines.

Microdeal's graphics man, Pete Lyon, has done a superb job of the intro. It tells the brief background story of a kid who ventures into a haunted house, where he is zapped by a sorcerer and turned into a bubble. Life as a bubble is not exactly a bundle of laughs, so you set about finding the spell book which contains a spell to turn you back into a human.

In bubble form, your biggest concern is your internal air pressure. You start on a pump in the central room. These pumps are essential if you are to maintain a sufficient pressure, but your thin membrane can only take so much air before bursting. Judging pressure can be tricky as the indicating bar is without any calibration, so it is easy to over-fill by mistake. In fact, your delicate skin gives you nothing but trouble.

Just like Knight Lore, the founder of the genre, Airball is played as a 3D platform game. As the tradition dictates, falling from heights and landing on anything remotely spikey results in death. Unlike Knight Lore there are no mobile hazards, guards or monsters. There are however some sneaky traps,

such as the rooms that drop you right onto a floor of spikes the moment you enter. Each time you lose a life you are put back to the last pump you visited which, can be frustrating as there is only a meagre sprinkling of them in the whole game. Would it not have been better to put the player just one room back the way he came?

The 3D does limit the scope for graphics, but the amount of detail is impressive to the point of confusing things. Some excellent music plays in the background, though as you would expect, after a few lengthy sessions of exploration it does get a bit monotonous. The same can be said of the rest of the game. Airball is a neat, attractive arcade adventure but I had hoped for more variety from a half-meg machine. There is a lot more you can do with a 3D arcade adventure, as anyone who has played Crafton & Xunc will tell you, but Airball has very few ideas of its own. It only offers short term entertainment for experienced gamers, but any newcomers seeking to cut their teeth should give it some consideration.

T.H.

Graphics: 6
Sound: 7
Playability: 6
Value: 6
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Pysgnosis



If ever there was a shoot 'em up solely concerned with gratuitous violence, this is it! At least if you are the last starfighter, you have your people, planet or whatever to protect, so melting hundreds of aliens is all in a good cause. Blood Money, on the other hand, supplies you with an artificial environment, like some kind of aggressive alien farm. There are four of these farms which the marketing boys have innocently publicised as safari parks, each on its own planet.

"You get to blow up anything you possibly can, and should you survive the whole adventure, intergalactic stardom and unimaginable wealth are promised."

It seems that evolution did a U turn somewhere after the 20th century, as the brains of Joe Public are incapable of seeing these safaris for what they are: hopeless death-traps. For a fee, the owners will supply you with a ship and give you access to either



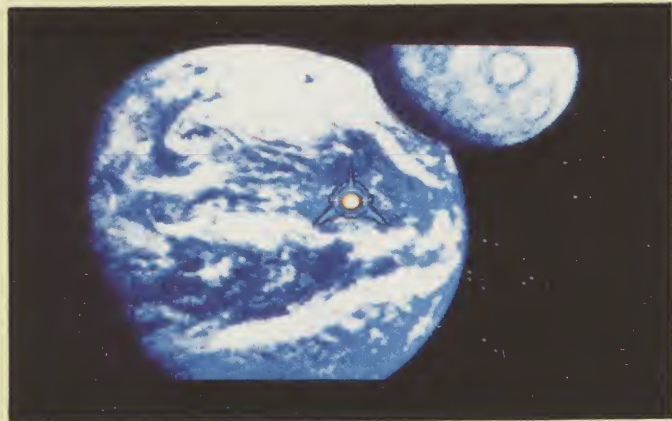
of the two tamest safaris. You get to blow up anything you possibly can, and should you survive the whole adventure, intergalactic stardom and unimaginable wealth are promised. So far, this has been attempted by many, but achieved by none.

Gibba will be your first port of call. Fitted out in classic hi-tech panelled decor, it throws you right in at the deep end. After a few predictable alien waves and the walkers have put in an appearance, the forced scrolling pushes you into some very tight spots.

"The helicopter of the first level is replaced by a submarine in the second, followed by a jet pack, and finally a little spaceship."

Fixed to the back wall, rotating arms spin dangerously, diverting your attention to scraping through the gaps as aliens and cash pass you by. That cash is contained in most of the aliens. Shoot them and a coin pops out for collection, the value of which corresponds to the size of the slain beast. As you start with a pathetic supply of bullets which usually die out before they hit their target, the opportunity to buy some decent weapons will be snapped up.

For a price you can add another couple of guns, rear firing missiles, bombs, extra lives and speed-



Bloody Monday



ups. Get blown up soon after stocking up your weapons, and you will find yourself skint, miles from the next shop, and armed with only the most basic system.

Everything else you expect in a shoot 'em up is there, from motherships to the red slime level and a simultaneous two player mode. The helicopter of the first level is replaced by a submarine in the second, followed by a jet pack, and finally a little spaceship. Throughout, the graphics are attractive, often brilliantly animated, but fail to break the accepted mould. The in-game sounds are helpful whilst not outstanding, but David Whittaker's title track, crammed full of samples, is certainly different. After the title sequence of the player's ship weaving through a 3D asteroid belt, the conformist game comes as a bit of a disappointment.

Gauging the difficulty of a shoot 'em up can be very tricky. If the aliens are dangerous fighters, then you should be well equipped. At times you are; with a selection of brand new weapons you are prepared for battle. Lose them, and the pea shooter

Remember Brattacus?

Psygnosis created on of the very first Amiga games: Brattacus. They have been faithful to the market since, though they hide their blushes now if you mention Brattacus.

At a time when the Amiga was starved of traditional scrolling shoot 'em ups, Psygnosis released their R-Type substitute: Menace.

you are left with is often totally inadequate simply for self defence alone. Weapons need to be more available. The typical Psygnosis packaging (including a poster of the cover artwork), plus impressive graphics and sounds make Bloody Monday a classy zapper. With R-Type and Forgotten Worlds as competition, it could just do with a dash more of that essential ingredient: playability.

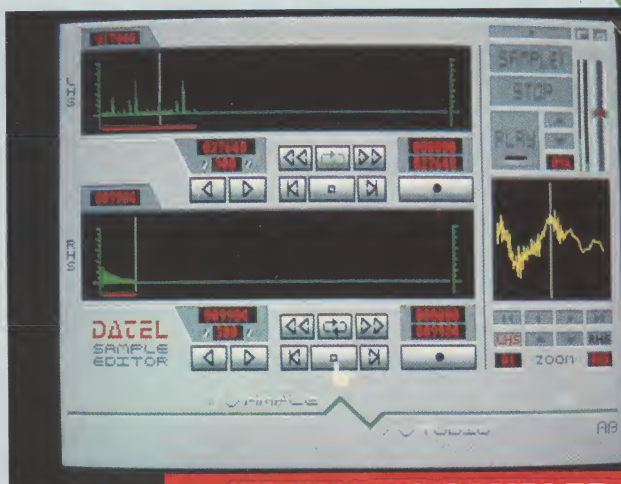
T.H.

Graphics: 8
Sound: 8
Playability: 7
Value: 7
Price: £19.95



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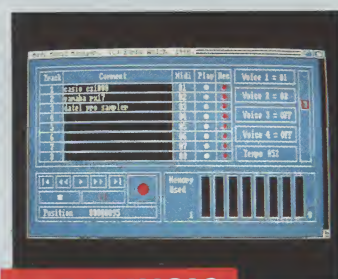
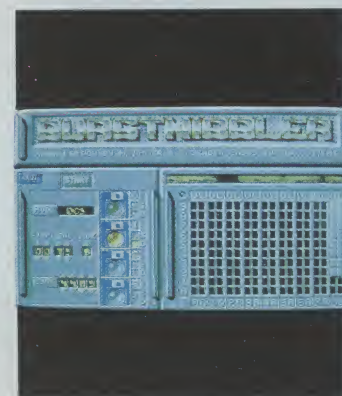
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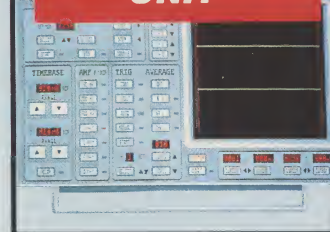
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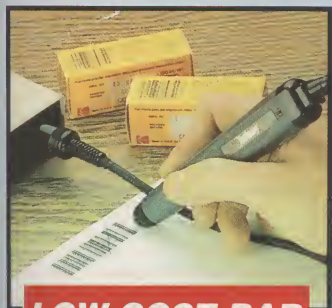
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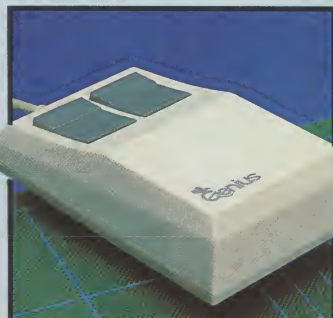
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Battlehawks is Lucasfilm's sortie into the realms of naval air combat simulation, not complete flight simulation, with the emphasis firmly placed upon evasive and attack manoeuvres rather than glide-slopes and ILS systems.

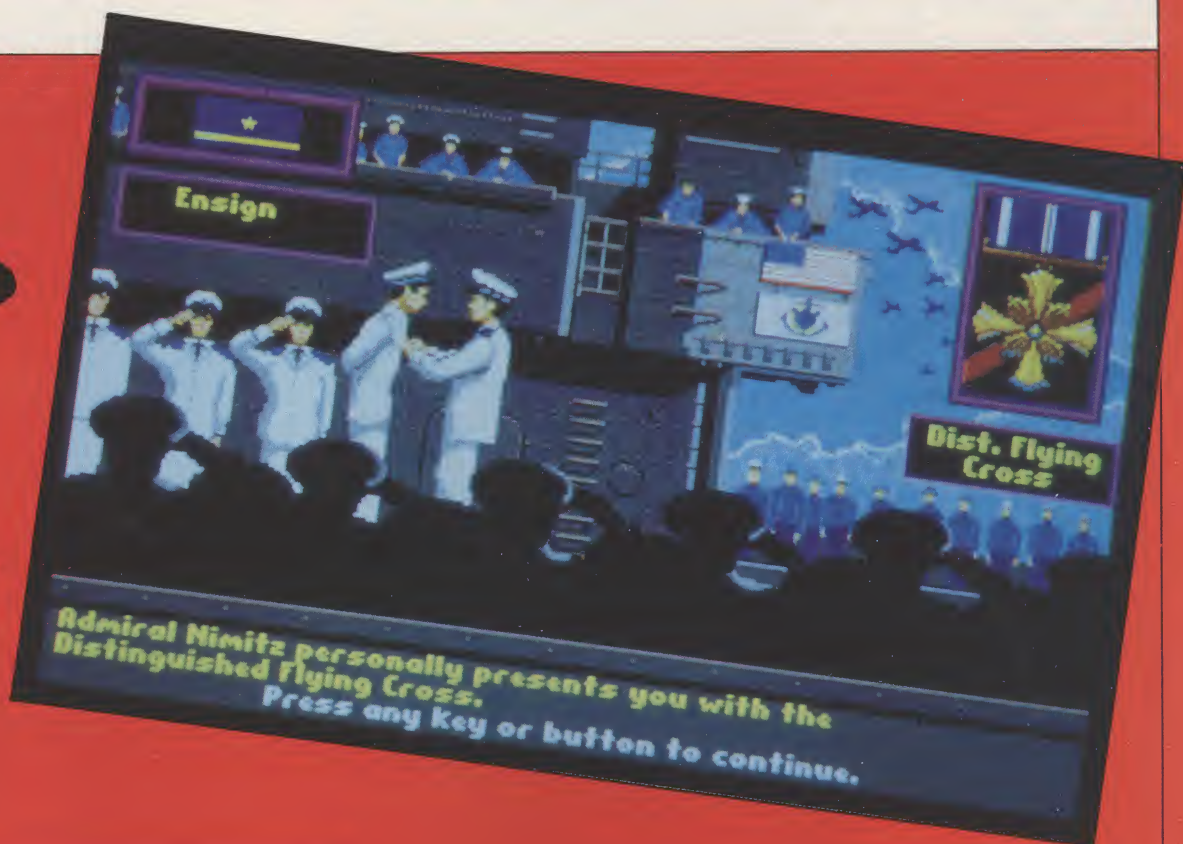
The package consists of two disks, an Amiga-specific reference card and a 151-page manual. The manual itself is a good historical reference which includes fold-out colour maps.

"You take the role of an American or a Japanese pilot each with 16 missions to fly."

Battlehawks concentrates on the four decisive battles that swung the Pacific War in favour of the United States: Coral Sea, Eastern Solomons, Midway and Santa Cruz. You take the role of an American or a Japanese pilot each with 16 missions to fly. The "Japanese" option is a welcome one but the fact that Lucasfilm hopes to market the game in Japan may have had something to do with its inclusion. The American pilot can fly the Wildcat, Avenger or Dauntless while the Japanese pilot may fly the Val, Zero or Kate. However, the interesting part about aircraft selection is that is historically accurate. That is, the aircraft not only differ in type but also in their particular variant. So a Dauntless flown in the initial battle, Coral Sea, will be of an earlier variant from a Dauntless flown in the later battle, Santa Cruz.

If you are after promotions and medals you will fly by the book. This means that when you select a mission the type and variant of your aircraft is pre-selected as well as the amount of ammunition you





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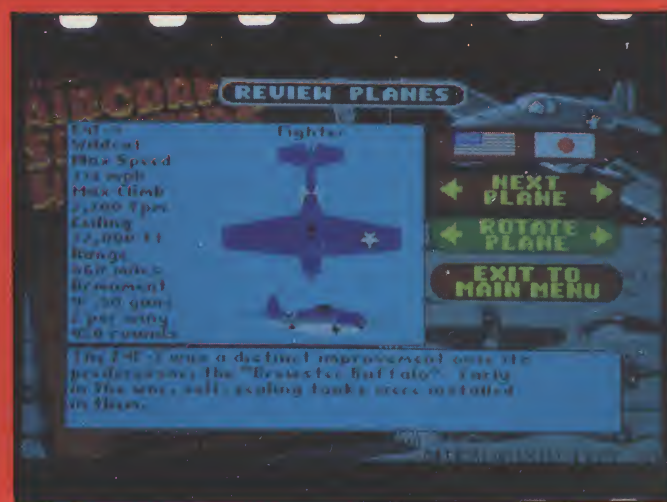
TM



possess, your starting altitude and so on. Altering these values invalidates your chance for official recognition.

There are four missions, all rated for difficulty, within each battle but the pressure is on to complete all of them as your pilot retires after completing 16 missions. You effectively get one shot at each mission. Taking time completing a mission hampers your chances of reaching higher echelons of rank and will, obviously, restrict your opportunities of gaining extra medals. You are able to pick and choose your missions, however, because they can be completed in any order.

You can examine each individual aircraft, via the main menu, where a three-view is provided with additional information. Unusually, the side view can



continued on page 87

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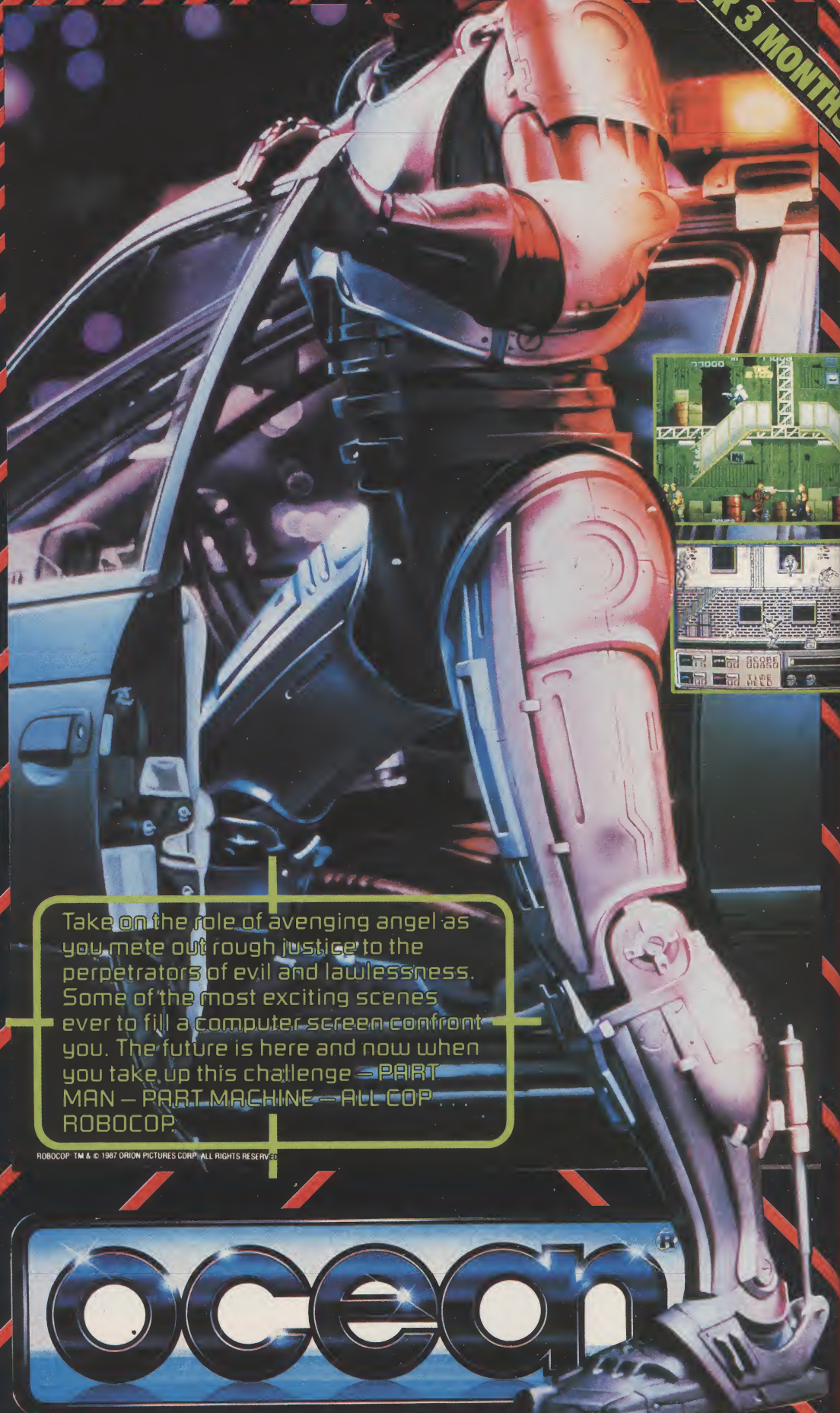


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ocean

continued from page 85

To assist the designing of *Battlehawks*, Lucasfilm sought the help of Dick Best. Dick was the Commanding Officer of the *Enterprise's* Bombing group 6 at Midway. He, himself, led his squadron of dauntless bombers against the Japanese carrier *Akagi*, hitting the carrier amidships. Best made a positive contribution to the game. For example, while viewing the torpedo attack phase on a pre-release copy Best commented that,

"The visualisation of the torpedo attack is very good, but the stall speeds are a bit off."

Co-designer, Noah Falstein used the information in the production copy of *Battlehawks* and then summed up Best's contribution,

"He has helped us fine tune the responsiveness of the controls. He is helping us a lot with the documentation, and is giving us the feeling that we are on the right track."

be rotated as a 3-D image. This is useful for recognising enemy aircraft even when viewed at unusual angles.

Graphically, *Battlehawks* is impressive. The program uses digitised images instead of polygons increasing the level of detail. While the images move around the screen smoothly, the action does slow, somewhat, when there is a lot of movement on the screen. Although this is a fairly rare occurrence and it has to be said that, with the amount of detail and action on screen, the Amiga version is the most playable of all. The PC version is jerky on all but the fastest (and most expensive) AT models while the ST crawls along. Excellent touches abound. Explosions are very effective, when an aircraft is hit and explodes bits of debris spin in the air, hitting the water with a splash. Whilst in the aircraft you can view to the left, right, downwards and behind.

Some aircraft have a rear-gunner which can control independently of the pilot's controls. The best viewing feature is the "Camera". This records, at your command, a period of flight. Afterwards, you can watch the sequence, a dogfight, for example, from different angles while zooming in at the same time to assess your progress - well this is Lucasfilm



after all! In fact, *Battlehawks* has the best graphical presentation of any flight simulator on the market today. Sound, however, while being effective, is nothing to sing about. Engine noises vary in frequency with different throttle settings, by-the-way, something those poor ST owners do not have.

As was mentioned above, I would not class *Battlehawks* as a complete flight simulator. For one thing you do not take-off or land. All the action takes place immediately before and after engagements. All of the cockpit displays are the same too. However, *Battlehawks* is excellent at doing what it was designed to do - simulating tactical combat.



A major factor in *Battlehawks* that I particularly like - is the feeling of being part of a team. Other flight simulators set you in the role of the lonesome cowboy, whereas *Battlehawks* gives you the impression that you are part of the posse. Fellow, computer-controlled, aviators may actually help you in your mission, engaging bomber escorts, for example.

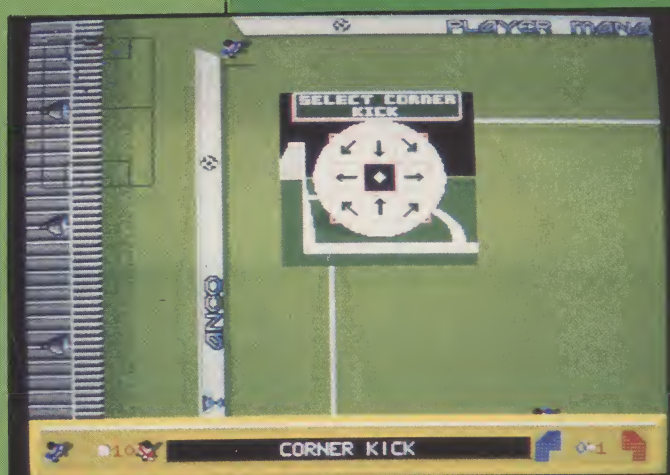
I can heartily recommend *Battlehawks* to anyone, including Flight Sim. enthusiasts, who is after something a little different. Lucasfilm should be congratulated for extending the boundaries of graphical realism and for succeeding in making you feel involved, one of the main aims of all leisure software.

P.R.

Graphics: 9
Sound: 7
Playability: 9
Value: 9
Price: £29.99

Putting my feet up, sipping cups of coffee and playing a decent footy simulation is my kind of entertainment - almost as enjoyable as the real thing. And I have certainly had plenty of it recently, with the excellent releases of Audiogenic's Emlyn Hughs International Soccer and Microprose Soccer by... (you guessed it). Kick Off is Anco's latest offering, giving you full-screen play with options such as penalties, sliding tackles and free kicks.

Before you play the game properly you might like to warm up a bit to get the feel of the controls. This is done by selecting the 'practice skills' option. This gives you the chance to kick the ball around the pitch without any interference from opposing players. To dribble the ball you run into it and keep the joystick pressed in whatever direction you were running in, this will result in your player tapping the ball up the pitch; this is unlike normal simulations in which the ball appears to be clinging onto your feet.



There are nine different directions to kick the ball from the corner flag, some of which are airborne and some not.



"There are nine different directions to kick the ball from the corner flag, some of which are airborne and some not."

At first this control method can seem a little confusing, and sometimes frustrating, but if you keep at it you will soon get the hang of it. You can pass the ball, chip the ball, or, alternatively throw it in from out of bounds. The computer controls the throw ons but corners are controlled by the player.

A game of footy wouldn't be complete without the odd sliding tackle here and there now would it? Or the occasional penalty. To slide tackle simply press the button while running into the player in possession of the ball. If you slide in too late you will send your opponent tumbling to the ground in spectacular form, thus giving away a free kick or penalty. If you do a particularly bad foul you will be shown the yellow card, or if you hack away at your opponent time after time you will be given your marching orders.

There are five skill levels to choose from ranging from a Sunday side to an International side. You can

ANCO

KICK-OFF

League Competition

	TEAM		P	W	D	L	PTS
	ITALY	C	0	0	0	0	0
	ENGLAND	C	0	0	0	0	0
	BRAZIL	C	0	0	0	0	0
	TONY*	C	0	0	0	0	0
	ARGENTINA	C	0	0	0	0	0
	WEST GERMANY	C	0	0	0	0	0
	USSR	C	0	0	0	0	0
	FRANCE	C	0	0	0	0	0

DONE

DONE



play against the computer, against a friend (or should it be enemy), or two players against the computer. I found that the two player mode was the best, but with the computer skill levels it still plays well on one player mode.

Apart from the single game facility, you can also take part in a league consisting of eight teams and lasting eight weeks. All teams play differently and you can also set your desired skill level.

There are a couple of little niggles I could pick up on, such as the lack of swerve shots and action replays to re-live those memorable moments. As it is, though, Kick Off's real plus is its playability factor. The game uses full PAL scrolling to give

maximum playing area and small but realistically moving sprites.

The odd thud of the ball and the referee's whistle together with one or two sampled voices are the only sound effects in the game, but these suit it well. The graphics have a certain cuteness about them and give the game a lot of character, especially when a player is fouled.

Kick Off is one of those games that is certain to top the charts, and it fully deserves to. No-one with the slightest hint of interest in football should be without a copy.

D.H.

Kick Off

Graphics: 8
Sound: 7
Playability: 9
Value: 8
Price: £19.99

Anco

First the good news: all nuclear weapons have been disposed of. The bad news is that it took a full scale nuclear war to bring the superpowers to their senses. Great numbers of conventional forces have been amassed as a result. The heads of the world's armies, powerful as they are, miss their old fashioned continent-melting missiles. They have joined forces to overthrow the political leaders of the world, with the intention of re-introducing nuclear arms, almost certainly leading up to a fifth great war which would finish the planet for sure.

"Prototypes of an armoured jeep and a helicopter gunship have just been completed and are the people's only hopes. You can take either (or both with a team mate) on your mission to stop the generals' advancing troops."

Prototypes of an armoured jeep and a helicopter gunship have just been completed and are the people's only hopes. You can take either (or both with a team mate) on your mission to stop the generals' advancing troops.



Silkworm



Both the chopper and the jeep have their own areas to patrol. The chopper, armed with forward and diagonally downward firing guns, has the freedom of around 80% of the screen. The rest is the

territory of the jeep. While the jeep's movement is far more restricted (though it can jump), its adjustable 180 degree machine gun compensates. Mobile enemies come in airborne and landbased varieties. Those on the wing swoop around in the usual patterns, running one after the other into your stream of zap. Down on the ground, rows of gun turrets pump guided missiles into the air. Shooting the mines releases clouds of shimmering plasma gas which act as shields. Shooting or collecting a second cloud instantly detonates it as a smart bomb.

More upgrades are contained in the gooscopters. These assemble themselves from indestructible components around a vulnerable nerve centre. Blowing them up reveals speed-up or twin-shot tokens. The generals leading the armies into battle wait at the ends of the levels in giant choppers and tanks.

Aliens, scrolling backgrounds and motherships have been seen hundreds of times before. Silkworm could have easily followed its coin-op parent and



Virgin Games

Silkworm

Graphics: 8
Sound: 9
Playability: 8
Value: 8
Price: £19.99

sunk without a trace if the programmers had not done such a superb job. Fast, smooth graphics are essential for a decent shoot 'em up. At last 16-bit programmers are beginning to scroll and slide sprites around the Amiga just as 64 programmers have been doing for years. Better still, there seems to be no limit on the amount of sprites shooting around the screen at any one time.

"Silkworm could have easily followed its coin-op parent and sunk without a trace if the programmers had not done such a superb job."

I cannot remember ever having seen a busier screen than those in Silkworm's later levels! Explosions are another vital element, and this is another of the game's highlights. In the distance you sometimes see a fleet of choppers, or jets taking off from an aircraft carrier, which confront you further into the game. Plenty of sampled sound effects enhance the mayhem of the battle. More than just a mass of

explosions, the effects tell you among other things whether your target has just vaporised, is getting there, or is totally indestructible. The title track is not half bad either.

Giving totally different vehicles to both players was a great idea. If you want a more conformist game you can take the chopper. The wierd control mode of the jeep makes it the one to pick for a more difficult and diverse game. The programmers obviously knew what they were doing. My one reservation concerns the level designs, which could do with a little more variety.

Satisfaction is something I look for in a shoot 'em up. I like a game that can match my hunger for alien zapping, and Silkworm has a feast of aliens you can chew off and spit out! What a change from all those others that pass through like a bowl of bran flakes.

T.H.

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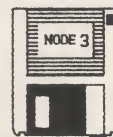
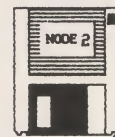
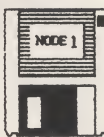
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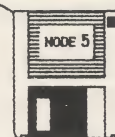
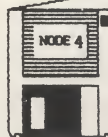
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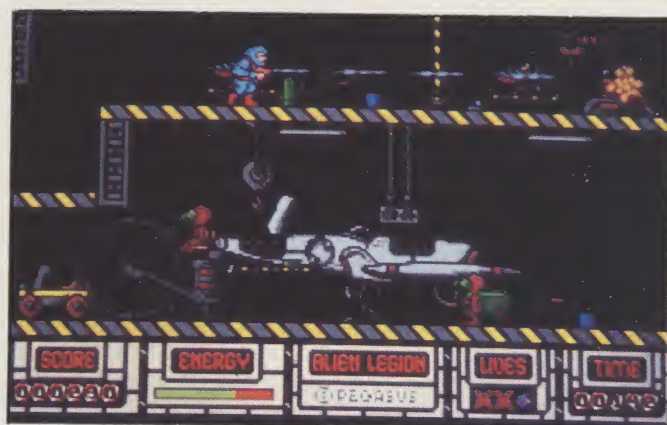
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HEARD IT ON THE GRAPEVINE

The word is that Gainstar, the boys who preempted the big companies and brought *Dungeon Master* and sword of Sodan to the shores of Blighty, have scooped a couple of hot new products. The first, *Alien Legion*, is the nearest thing to a scrolling Amiga version of Hewson's *Exolon*. Similarities are most noticable in the central character. His job is to stomp along the walkways, platforms and tunnels, zapping little men in Martian suits along the way. The cunning level designs include such devious twists as dead ends, and worse still, bottomless pits! If you can manage to keep a firm grip of yourself through that lot you may just survive the attack long enough to set eyes on some of the wierd and wacky aliens lurking deeper in the game's innards.

The second, *Targhan*, was written by Silmarils, the programmers of the Double Dragon variant *Manhattan Dealers*. It's a multi-screen fantasy arcade adventure. A muscular barbarian takes the lead role, with a supporting task of faries, valkyries, demons and other assorted favourites from the Land of Make-believe. Dicing their brains and hacking their hearts is the only way to stay alive, so plenty of wild swordplay is called for. The screens don't scroll, but are static, much like Palace's *Barbarian II*, which I am assured is due for release any day now. Where have I heard that one before?

Egg fans will thrill to the news that Pick 'n' Choose have released the Amiga version of the old 8-bit hit *Chuckie Egg II*.



A chocolate egg factory has gone haywire. Experienced egg handler Egg House Harry has been called in to sort it out. Hours of fun for platform-perfectionists looking for a slice of the old days.

Well on the way from Electronic Arts is *Test Drive II: The Duel*. After choosing your motor from a line up including a Porsche 944 and a Ferrari F40, you get the chance to thrash the nuts off it in an illegal race along the highways of California. Sounds like my kind of game!

Other goodies due to appear on your local shelves in the near future include *Voyager* from Ocean. The *Voyager II*, launched in 1977, has informed the Roxiz of our presence in the universe. Predictably they set out to invade Earth, but Luke Snayles, returning from a 50 year solitary sentence in space has other ideas. What looks like some kind of strategy adventure turns out as a solid 3D update of *Battle Zone*. Grab hold of a special pod which allows flight, and the game takes on another dimension. You even get a short soundtrack thrown in on an audio tape, absolutely free!

Melbourne House are bringing out 'Magic Johnson's Basketball' which claims, in a 1Mb version to be identical to the arcade game!

Maxis Software in California are launching a game that gives you control over a whole city. *Simcity* lets you build your very own city or choose one of eight on the edge of disaster like San Francisco 1906, before the earthquake or Boston 2010 before a nuclear meltdown. Have a good destructive time!

T.H.



The DM Handbook

If you are reading this and are the proud owner of an Amiga that has the memory capacity of one meg or over, it is more than likely that you have a copy of *Dungeon Master* tucked safely away in your games collection.

That being the case, you have probably spent untold hours trying to guide your party of four brave adventurers through Chaos' deadly dungeon in search of the legendary Firestaff, the only item that can destroy the evil genius.

It goes without saying that you have more than likely come across a situation in the game which has you stumped. These situations can be many and varied, ranging from being stuck in front of a seemingly impassable force field to getting lost in the ever-changing passageways of the dungeon itself.

No doubt you have spent many a sleepless night trying to solve all these problems and are nearly at the end of your tether. Well, you can now sit back and relax as help is at hand!

The *Special Reserve* club have just released The *Dungeon Masters Handbook*, which is a 24 page, A4, looseleaf guide to the computer game. *Special Reserve* is in fact an organisation run by computer gamers for computer gamers, and as you would expect the handbook they have produced is full of no-nonsense hints and tips for the serious gamer.

The handbook opens with an introductory section which covers general play overall. The advice given is straightforward, well written and very, very useful. For example, did you know that if you saved your game on two disks, you can map out a whole level more slowly and save it on one disk, then move through the pre-mapped dungeons more rapidly playing with the second! This saves a lot of food and could save your parties life in the long run.

It then goes on to list and describe almost every monster that you will meet on your travels and this is supported by a breakdown of their abilities, traits and, most importantly, their weaknesses.

The book also includes a section which is dedicated to one of the most important areas of the game - the Spells. Although the handbook provides details of at least 25 spells, including how to cast them and what the effect might be, it still fails to include at least 11 other spells with which I am familiar. For me this is the weakest part of the handbook, and if *Special Reserve* would have spent a little more time and effort, they could have come up with the full range of spells and potions, the knowledge of which could well save a party from extinction.

Special Reserve make up for this in the next

section, which details the dungeon levels. Each of the fourteen levels of *Dungeon Master* is clearly and correctly mapped and accompanied by a selection of notes that can do nothing but help the player. The map of the first level comes with a complete breakdown of the 24 characters you may choose to obtain the four required, and this gives you a head start right from the outset, as you can select the four most powerful characters straight away.

The rest of the maps show where special items such as keys, weapons, food and potions are located, while the notes give a resume of each level including any monster, traps or force fields you may encounter.

The maps, while being clearly reproduced and readable, are a bit on the small side. On the other hand the information is supplied in such a way that it does not spoil your enjoyment of the game, as a certain amount of 'reading between the lines' is necessary.

However, certain pieces of crucial information, such as the solutions to several of the mazes, are given in full and this will be much appreciated by players who are totally lost.

Conclusion

All in all the *Dungeon Master Handbook* contains a tremendous amount of useful and interesting information that will open the eyes of the games most ardent player. I have actually managed to finish *Dungeon Master* and I still learned something new!

W.

The *Dungeon Master Handbook* is only available to members of the *Special Reserve* club. For the record *Special Reserve* is a club that allows its members to obtain the latest computer games at bargain prices.

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DATA STORM

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Were you one of those people who used to shove a coin in the local Defender machine, and hog it for the rest of the day on that single credit, clocking it a few times in the process? Well, now, all you ego-trippers can invite your friends round to watch you do it all again, this time with Datastorm on your Amiga. Programmer Soren Gronbench, whose past projects have included Sword of Sodan, has used the classic shoot 'em up as the core of the game, bringing it up to date with motherships, extra weapons and the like.

"These populations have brought themselves together in eight survival pods, waiting for a hot-shot pilot such as yourself to wisk them off to a new world."

When the planet Xerxes exploded, its eight orbiting colonies were blown into deep space. These populations have brought themselves together in eight survival pods, waiting for a hot-shot pilot such as yourself to wisk them off to a new world. These pods take the place of Defender's humanoids. The journey is long, and fragmented into many levels. Each level is connected to the next by a teleport beam extending from the planet surface. Your job is to pick up the pods and drop them off in the teleport. As in today's world, there is no shortage of scavengers, eager to take advantage of others' misfortune.



Throughout your rescue attempt you are constantly hounded by these aliens, the most common of which are the landers. These hover around the skies, letting off erratic shots, before swooping down to snatch a pod. A distress call from the pod tells you it

is in trouble and needs your help. If you manage to reach it before it is actually picked up, all you need to do is to blow away the attacking lander. If, as is usually the case, you find the pod being hoisted skyward, some precision shooting is called for to blast the lander without hitting the dangling pod. Failure to stop the lander in its task results in it transforming into a mutant (far more deadly than a lander), and the pod transforms into a traitor. Traitors continue life among the remaining pods and must be destroyed; trying to pick one up will blow you to bits.

DATA

Sword swinging Soren strikes again... Soren Gronbech, 19, hails from Holland. As the author of Sword of Sodan, which won the Commodore Computing International Oskar for best arcade game of the year, Gronbech was the first programmer to incorporate massively sized sprites into an arcade action game on the Amiga. The sprites in Sodan stand 2/3rds the size of the screen.

STORM

Although the pods have only the landers and the stomping bipods to fear, your foes are far more numerous. Some of the more common include close relatives of Defender's pods and burgers. The datastorm of the title is a fast moving swarm of aliens that takes a lot of zapping. A baby mothership in the traditional flying saucer mould precedes the enormous space-squid, which in turn gives way to an equally sizely skull. Extra weapons pods are collected for double or triple shots, auto rapid-fire, shields, warps and missiles which automatically home in on attacking landers. Clear a level with all your pods intact and you are given a little man. He walks along the planet surface, and once shot, will let off random smart bombs. On the other hand, shooting or losing all your pods takes you into hyperspace, where all the aliens immediately turn into mutants. You also get the option of a simultaneous two player game.

"The game sounds very much like the coin-op. In fact, some of the effects are identical."

As is customary for Amiga games, Datastorm has its fair share of intro screens. The effect of the heatwaves from the ship's exhaust on the game over



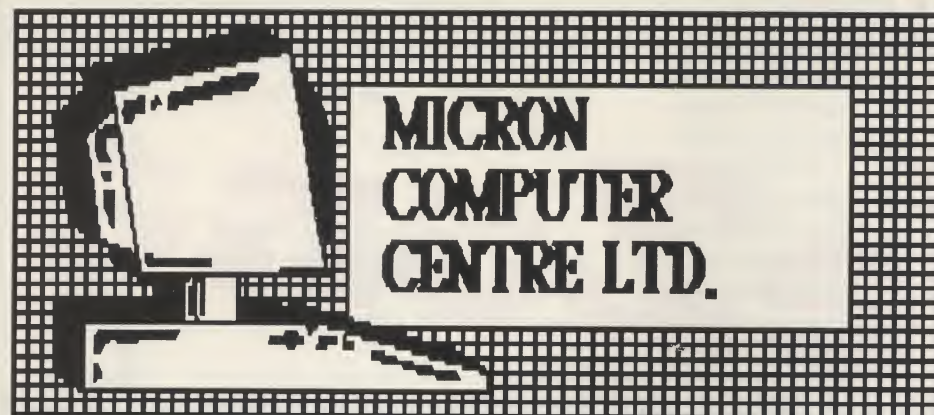
screen is especially well done. Clever as they are, it would have been a good idea to somehow skip all the loading and fancy screen wipes between games; just an option to restart with the same game preferences would be welcomed by the more impatient zappers among us. Compare Datastorm to a handful of popular shoot 'em ups, and it looks pretty basic. Bar the motherships, all the sprites are very small, and the only background graphics are the starfield and the scrolling strip of the planet surface. In its favour, the screen is often packed full with laser spray, aliens and debris from exploding ships. The game sounds very much like the coin-op. In fact, some of the effects are identical.

Updating old ideas is not the way forward for computer games, but I have to admit I found this brilliantly addictive. I can see (and know for a fact) that some will dislike it for its unoriginality, far from the innovation of Sword of Sodan, but I like it. Fast and noisy, with a tough but well balanced difficulty level, Datastorm is a bare essential for all ex-Defenders.

T.H.



**Graphics: 5
Sound: 8
Playability: 8
Value: 7
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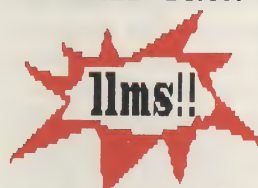
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PSS FireZone

FireZone is labelled as a game of 21st Century Warfare between the super powers of the time, the Pacific Combine and the European League, and has been produced by the PSS company as one of their Wargamer series. All the scenarios within the game depict ground based action without the use, happily, of nuclear weapons. The game is played on the usual hexagonal grid across which your various groups of men and equipment move.

The terrain that goes to make up the battle field varies from clear countryside to urban or ruined towns. Some hexes are shown as water and few of the units can cross these, unless a bridge is included for the purpose.

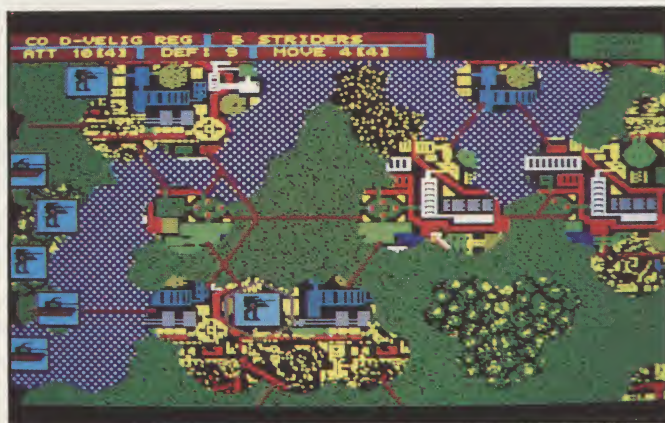
The equipment includes futuristic features such as Nova guns, Striders (from Star Wars?), Grav tanks and the ultimate, a Leviathan, which should be avoided. Each of these has the fire power of large numbers of their 20th century equivalents. All the equipment appears in pictorial squares over the hexagonal grid.

Play consists of rounds of movement followed by combat, with opponents taking turns for the movement phase. The combat between individual units is randomly selected by the computer, but the human player is allowed to select which particular unit they wish to fire on.

Details on the strengths about each unit are displayed at the top of the screen when the hex is selected by the mouse or cursor. The results of combats are also displayed in the same area.

"There are a number of preset scenarios which can be played and the game includes a construction element so that you can develop your own."

There are a number of preset scenarios which can be played and the game includes a construction element so that you can develop your own. The game can be played by two humans or a single human against the computer and the choice of sides is also possible. An added feature is that the opposing forces can be hidden from sight unless one of your units is in line of sight with the enemy. While this is not really relevant in the two player game, it



does add to the interest when pitted against a computer opponent.

The program uses the graphic and colour capabilities of the Amiga, to greatly improve the screen display over and above other computer versions of these games and the units are quite easy to see and recognise. The play is quite quick, but it cannot be classed in the Shoot 'em up category.

The package comes with a thirty page manual and quick key guide. A blank hex sheet is also provided so that you can design your own battle zones before entering them into the game. The game is simple to play, but is nevertheless addictive in its qualities and it will be interesting to see the next simulation that is given the same treatment.

L.K.

Strategy and simulation games have been around for a number of years. They began by using pieces of cardboard and paper and progressed onto computers when they became available. A problem they suffered from though, was the amount of detail required to be displayed on the screen and the C64 struggled under this task. Now however, they have progressed to the Amiga and the difference is amazing.

Graphics: 8
Sound: 6
Playability: 9
Value: 8
Price: £24.99

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Vindicators

Tengen

Today's consignment of Earth invaders are from the evil Tengen Empire. They have arrived in fourteen space stations from which they intend taking over the Earth. It is decided to send in two SR-88 battle tanks, otherwise known as

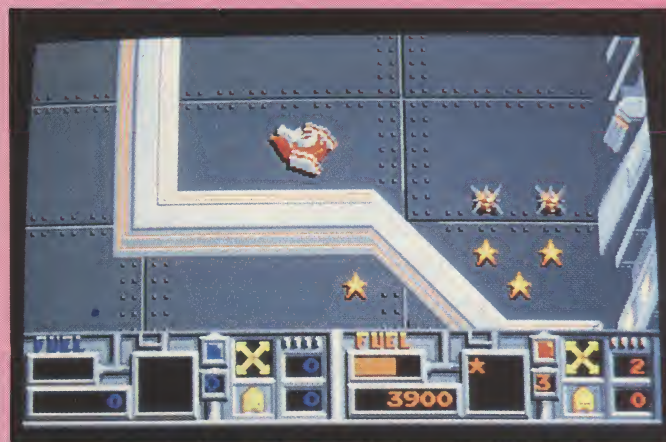
"If the mission goes to plan, together they will infiltrate each station and take out its control room, eventually shutting down the entire system."

the Vindicators. If the mission goes to plan, together they will infiltrate each station and take out its control room, eventually shutting down the entire system.

A rose by any other name...

APB, Xybots, Vindicators, Toobin and Hard Drivin' are some of the most original and playable coin-ops to have appeared recently. Domark have set up Tengen as their label for coin-op conversions, with Vindicators as their first in the series. Domark's name is a combination of the founder's names: Dominic Wheatley and Mark Stracham. Domark have also produced the games versions of the major 007 films: Live and Let Die, A View to a Kill, and The Living Daylights. Watch out for the next in the series - A Licence to Kill, appearing shortly.

In Atari Games' favoured fashion, you get the option to start the game on any of the first three stations. The control rooms lie at the end of a string of sub-levels, so your main objective is to blast your way to the top of each level. The Tengen Empire have cottoned on to your scheme and put their own tanks on the job. As you make your way up to the doors leading to the next level, encounters with enemy tanks give rise to shoot outs. With both tanks



sniping from behind walls and barriers, you could almost be playing that game from the old Atari VCS Combat cartridge. Static hazards such as the gun turrets and electrified barriers provide more target practice.

Not everything you find is begging to be blasted; a fair sprinkling of collectables are strewn around the stations. Most important of these are the keys, used in the majority of levels to unlock the doors at the end. Upgrading your tank is achieved by picking up stars along the way. Between levels you can trade these in for improved shot range, shot power, speed, shields and fuel. Selecting to start on level one will force you to gradually build up your star stocks as you go. However, begin on the second or third and a hefty supply will be awarded, making substantial add-ons affordable from the start.

No-doubt for financial reasons, Domark have taken the easy route and ported the ST game. ST ports are not automatically a bad thing, as some games can work equally well on both machines, but in a scrolling, sprite-based game such as this, it is a shame to see the Amiga's potential ignored. If an exclusive Amiga version is not possible, at least a compromise would be something. Why not port the peripheral code and graphics data, but modify the sprite and scrolling routines?

Despite the imperfect and often slow scrolling, the two players' tank sprites trundle around in a suitably solid fashion. Thundering blasts from their cannons would have been nice; instead you get a sound effect just like Questor The Elf's bow in Gauntlet! Addicts of the coin-op should get a lot more out of it than I did, though it is unlikely many others will.

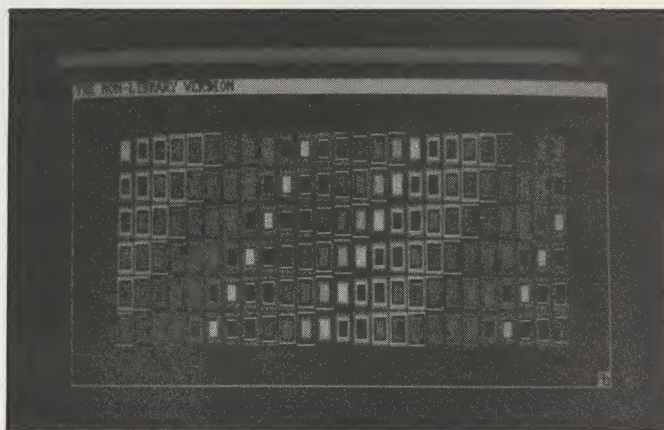
T.H.

Graphics: 6
Sound: 6
Playability: 7
Value: 6
Price: £19.99



Amiga Library Calls

Last month the program accompanying Amiga Library Calls was inadvertently not printed. We apologise for any inconvenience. Here is the program in its entirety.



```
REM -----
REM      TEST PROGRAM WITHOUT USING LIBRARY CALLS
REM -----
SCREEN 1,640,200,4,2
WINDOW 15,"THE NON-LIBRARY VERSION",(20,20)-(600,180),1,1
WINDOW OUTPUT 15

FOR h%=1 TO 6
  FOR i%=0 TO 5
    FOR j%=0 TO 24
      x1%=20*j%+50+h%
      x2%=x1%+20-2*h%
      y1%=20*i%+20+h%
      y2%=y1%+20-2*h%

      AREA (x1%,y1%)
      AREA (x2%,y1%)
      AREA (x2%,y2%)
      AREA (x1%,y2%)
      AREA (x1%,y1%)
      COLOR ((i%+j%+h%+1)MOD 16),0
      AREA FILL

    NEXT j%
  NEXT i%
NEXT h%

X$=INPUT$(1) 'wait for a key-press

WINDOW CLOSE 15
SCREEN CLOSE 1
END
```

Test program without using library calls

```
REM -----
REM      TEST PROGRAM WITH LIBRARY CALLS
REM -----
DECLARE FUNCTION RectFill% LIBRARY
DECLARE FUNCTION SetAPen% LIBRARY
LIBRARY "graphics.library"

SCREEN 1,640,200,4,2
WINDOW 15,"LIBRARY VERSION",(20,20)-(600,180),1,1
WINDOW OUTPUT 15:rastport%&=WINDOW(8)

FOR h%=1 TO 6
  FOR i%=0 TO 5
    FOR j%=0 TO 24
      x1%=20*j%+50+h%
      x2%=x1%+20-2*h%
      y1%=20*i%+20+h%
      y2%=y1%+20-2*h%

      e%&=SetAPen%&(rastport%&,(i%+j%+h%+1) MOD 16)
      e%&=RectFill%&(rastport%&,x1%,y1%,x2%,y2%)

    NEXT j%
  NEXT i%
NEXT h%

X$=INPUT$(1) 'wait for key-press

WINDOW CLOSE 15
SCREEN CLOSE 1
LIBRARY CLOSE
END
```

Test program with library calls

continued from page 47

Copy, Cut and Paste operations are eased by the cell selection system. To select any range of cells, simply hold the mouse button and "drag" the pointer to the end of the range. Selecting an entire row or column is as easy as clicking the heading. Also, getting round the sheet is accomplished by the Zoom mode. Here, a very extensive part of the sheet is clearly displayed so you can click where you want to be and reduce back to normal view.

Without doubt though, the best part of the whole package and what makes it stand out from the rest are the graphics. These justify purchase of the Amiga themselves. Ten different charts are available, from line graphs to 3D bar charts. Better still, the 3D designs can be rotated at the click of a mouse button!

Other features of Plan/IT worth mention are: a macro control language - with a debugger; full set of financial and statistical functions; built-in database facilities; ability to import Lotus 1-2-3 and Symphony files - later versions will export Lotus as well; instant help on any menu; palette and style setting for text. Plus, it runs on a basic A500 - just.

Conclusion

In summing up, I have to admit when Plan/IT first arrived I thought "Oh no, not another spreadsheet!" However, after just a few hours use, I have had to prise myself away from the computer just long enough to write this. The system is so friendly in

every respect - from file requesters to data entry - it makes me wish all applications were like it. Plan/IT deserves to be the standard by which all other spreadsheets are assessed; I can recommend it without fear of compromise.

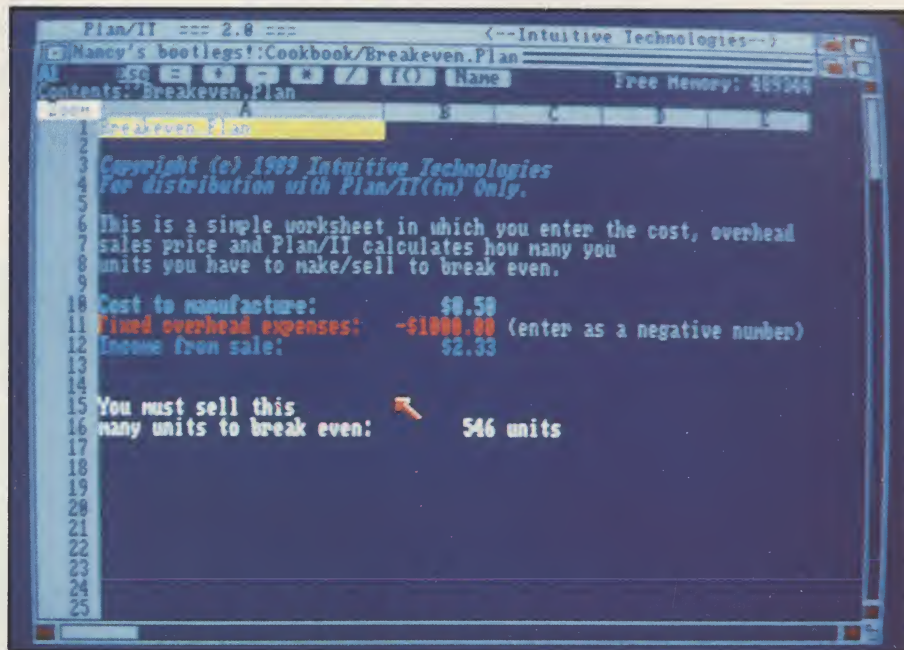
M.S.

Product: Plan/IT 2.0 interactive spreadsheet

Price: £89.95

Points for: Fast, supremely easy to use, intuitive, well designed, superb graphics, friendly, designed specially for the Amiga. **Drawbacks:** A little too keen to re-draw graphs, otherwise I cannot find fault.

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Look at it this way - you want the speed and massive storage capacity of a hard drive, but you cannot afford to pay the price demanded by the Commodore and the Amiga OEMs. Worse still, if you happen to have an A500, Commodore just will not even admit to having a price for the latest word in hi-tech gadgetry, the A590 20Mb hard disk drive; even though the unit was first demonstrated in public at the World of Commodore show in Toronto in 1988.

AUI's hawk-eyed journalists were the first from Britain to see the new baby in action and the first to bring the news to you. Since then Commodore have kept very quiet about the A590, keeping us all at bay with a few sneak pictures and even the odd specification. Nevertheless, rumour has it that when the A590 eventually does arrive in UK dealerships, it will cost upwards of £600 (a price which may prove prohibitive for the typically conservative British wallet - especially since the unit only boasts a relatively slow 20Mb 3.5" hard drive).

On the other hand you could try one of the other suppliers of hard disk units for the Amiga. Surprisingly enough, over the last year or so, quite a large number of third party drives have become available at steadily decreasing prices.

However as later inspection reveals, these are not just some unheard of, no doubt unreliable drives; instead, they are tried and tested IBM PC based systems. What makes this system so special is the unique system of piggy-backing an existing third party controller onto a "pass-through" board to the Amiga.

The end result for the user is twofold. Firstly, the IBM based drives tend to be slightly cheaper; second, and more important, you get a lot more choice over what you get. There are currently no less than seven systems ranging from 20Mb up to a staggering 230Mb - that is, 23 times

the mass storage of the IBM PC-XT or over 10 times the storage of the A590. Not only that, but you also have a choice of the final configuration - so you can sacrifice a little speed to save a little money.

All the systems are built in two main parts. The first is the drive itself. This is a standard external hard disk drive such as you may find in a powerful PC setup. Even so, your choice is not just limited to physical storage capacity, but also to the type of drive in question.

"In fact, this unusual design does more than make the Amiga talk - it makes it sing."

The second part is the really clever bit - what makes the Amiga talk to a standard PC external hard disk. In fact, this unusual design does more than make the Amiga talk - it makes it sing. Manufactured in America by Spirit Technology, this little box of tricks is known as the HDA506. Unlike other HD drives for the Amiga, which use an interface known as SCSI (pronounced skuzzi, it means Small Computers Standard Interface) the HDA506 uses a technique known as Direct Memory Access or DMA.

In essence, DMA is when an external peripheral or chip, a hard disk controller in this case, is allowed full access to the machines RAM whilst the processor is effectively asleep - processing instructions. Explaining more than the fundamental principals of DMA is beyond the scope of this review, but suffice to say it is considerably faster than the more common SCSI. The problem with this is that the peripheral must remain ON all the time the machine is running. In the case of DMA peripherals like HD drives this will rarely be troublesome. The Spirit system can be

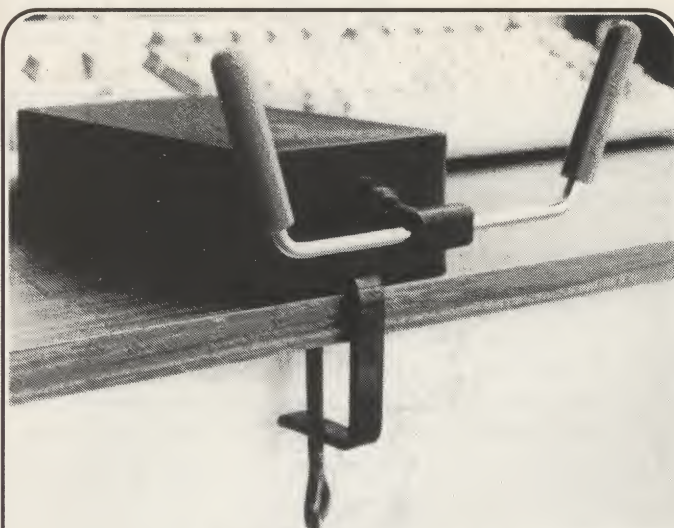
supplied either in kit form or as a pre-configured system. For the purposes of review we obtained the full working version - as a box of parts.

The faint-hearted among you can relax now, all is not as bad as it sounds. The system is supplied in parts to make it a) less prone to damage during shipping and b) more versatile. All that is needed to assemble the whole thing is a small Philips screwdriver and about 30 minutes patience. Firstly, the three interconnects are passed into the case and connected to the controller card. Next the controller is plugged, piggy-back, into the HDA506 board. Finally the whole assembly is mounted in the case.

Now all you have to do is plug the box onto the Amiga and away you go. This is when the only real problem of Spirit's otherwise superb system comes to light. On the A500 machines at least, the interface sits right beside the left hand shift key and tends to get in the way (although you do get used to this). The reason for the height problem is a matter of the way the interface cards are laid out although this is unavoidable with the current design, it still seems a shame.

"Switch on and prepare to be amazed with the incredible speed of this DMA based drive, Workbench can be booted in under 8 seconds on a 1.3 machine."

The real proof of the pudding is in the eating though. Switch on and prepare to be amazed with the incredible speed of this DMA based drive, Workbench can be



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10. Falcon	Mirrorsoft	£29.99

booted in under 8 seconds on a 1.3 machine. Compare that to Commodore's miserable 90 seconds or so. With a 1.2 Kickstart, the improvement is not so good, about 37 seconds in all, but I have no doubt this could be improved with some judicious tweaking by the user.

The overall speed of the system is quite breathtaking, just about the fastest you will see this side of £2000, and we have provided benchmarks just in case you do not believe it. All-in-all, it offers users a good and expandable entry into the world of the Winchester. Although the system lacks the aesthetic appeal of some of the competition, it more than makes up for it in terms of raw meaty power and overall value for money. Before you buy a hard disk drive take a good look at this one. Highly recommended.

M.S.

Product: Spirit HDA506 sub-system + hard drive for A500/1000

Price: 20Mb £350 inc. VAT

42Mb £475 inc. VAT

230Mb £1499 inc. VAT

Contact: Bytes and Pieces, 37 Cecil Street, Lytham, Lancashire, FY8 5NN
Tel: 0860-254344

Points for: very cost-effective, comes in kit or pre-built form, exceptionally fast, versatile, supports up to 2 drives - 460Mb!

Drawbacks: Looks "agricultural," not very portable, unwieldy on an A500, poorly produced manual

The truths about access times and mass storage

Typically, when you order a hard disk manufacturers quote a figure regarding the "access time" of the disk. This is essentially how long the read/write heads take to get to the required track. All of these are measured in milliseconds (mS) and can vary from 80mS (slow) to around 17mS

Table 1: Standard benchmarks compiled by the PD utility DrivePerFA

Benchmark	Spirit HDA506	Floppy	RAM:
Create file	37 Files/sec	0 Files/sec	5 Files/sec
Delete file	55 Files/sec	1 Files/sec	10 Files/sec
Dir scan	96 Entries/sec	42 Entries/sec	5 Entries/sec
Seek/Read	84 Srs/sec	16 SRs/sec	51 SRs/sec
Read 1/2k buffer	29,789 Bytes/sec	11,702 Bytes/sec	201,649 Bytes/sec
Write 1/2k buffer	65,536 Bytes/sec	5,002 Bytes/sec	145,635 Bytes/sec
Read 4k buffer	163,840 Bytes/sec	12,423 Bytes/sec	655,360 Bytes/sec
Write 4k buffer	163,840 Bytes/sec	5,160 Bytes/sec	291,271 Bytes/sec
Read 8k buffer	238,312 Bytes/sec	12,423 Bytes/sec	873,813 Bytes/sec
Write 8k buffer	201,649 Bytes/sec	5,160 Bytes/sec	291,271 Bytes/sec
Read 32k buffer	327,680 Bytes/sec	12,603 Bytes/sec	873,813 Bytes/sec
Write 32k buffer	262,144 Bytes/sec	5,180 Bytes/sec	327,680 Bytes/sec

(very fast). There are however other factors to take into consideration before the final - realistic - figure is calculated. These are: the type of format used; the number of heads - 4, 5, 6 even 8; and the total number of cylinders (double-sided tracks).

In practical terms this means a 28mS 20Mb drive with 4 heads and 620 cylinders, can actually work out slower than a 40mS 42Mb drive with 6 heads and 820 cylinders. This is because, in the larger capacity drive the heads may not have to move as far to get the same amount of information.

Think of it this way: In the 20Mb machine each head covers $620/4 = 155$ tracks; in the 42Mb machine each head covers $820/6 = 137$ tracks approximately. Also the tracks in the 20Mb unit hold about 129Kb each, and in the 42Mb model hold about 306Kb each. So, to read a total of say 200Kb, the larger unit only has to seek one track; the smaller one has to read one complete track, then move on to the next.

Finally, there is the question of the drive's actual capacity. Manufacturers

now have two different standards in common use - Modified Frequency Modulation or MFM, and Run Length Limited or RLL. Of the two, RLL is the most recent and the most efficient storagewise. In fact, an RLL formatted drive can hold about 1.5 times as much information as the equivalent MFM unit.

This leads to a problem which allows unscrupulous dealers to make a fast buck out of unwary buyers. All HD drives are the same - from the outside. On the inside some have higher density surfaces than others - like floppy disks. This means it is possible to combine a 20Mb MFM drive with a 32Mb RLL controller and hey presto, a 32Mb drive. Not for long though. Unless the drive is certified by the manufacturers as being RLL it will fail very quickly. Just outside the guarantee period probably.

Similarly, there is a temptation to buy an RLL controller and put it with an MFM drive. Never do this - you will only have yourself to blame when the data starts to vanish.

The Amiga in France

continued from page 38

market needs are (1) importers and distributors who make the effort to translate products and manuals into French, and (2) a lively, varied and open Amiga French-language press. The first requirement is still a long way off, but one or two distributors are making a real effort. However, in the past two months Commodore France's relations with A-News have improved, with the appearance of the first

Commodore advertising and then the sending of press releases. It seems that this peculiar and unfortunate 'war' may be heading to its end.

One year on, A-News is still a small magazine fighting to make a place for itself in the world, but judging by readers' reactions the 'magazine built on an A500' has a bright future. With a current print run of nearly 20,000 and growing sales in Switzerland, Belgium and French-speak-

ing Canada, things can't be that bad. The A500 has metamorphosed into a 2000 with three megabytes of RAM and a GVP Quantum 40 megabyte hard card. Lepper even has a secretary one day a week to count the money. He is hoping she will be increasingly occupied with this pleasant and useful task that as yet no-one has been able to persuade even the Amiga to carry out.

Z.M.S.

PICTURES FROM SPACE

Amiga owners can now receive FREE weather satellite pictures beamed down from Space with the latest Microtext Teletext Adaptor and just an ordinary TV aerial. The pictures originate from sources such as MeteoSat, a satellite with built in cameras orbiting high above the equator. The Met-office's super-computers receive the Satellites signal and process the picture to make the view appear to be from overhead Britain.

The pictures are transmitted on CEEFAX but cannot be received on a normal Teletext TV, only by a computer with a Teletext Adaptor and the relevant software. New pictures are sent regularly and are presented as an index of names on the Amiga's screen, any of these can then be downloaded by simply pointing and clicking with the mouse. Any of the images can then be selected for display. The picture is saved as a compact data files, the Microtext software can then select these for display. Images can be overlaid on one-another - this allows a grey scale cloud

picture to be placed over a blue and green land and sea image. The resulting display can then be saved as an IFF files for printing out or processing with any Amiga pint package. The pictures are sent as part of the BBC's Telesoftware service.

Telesoftware already broadens the appeal of teletext on a micro as users are able to download data and programs free from a selection that is changed each week, programs are available for PC and the BBC micro - most of which can be run on the Amiga with Commodore's new "BBCEmulator".

As well as being able to receive Satellite pictures and Telesoftware the Microtext Adaptor enables normal Teletext to be received. Features include the ability to print pages, save pages to disk, translate pages to speech and to run completely automatically. It also converts a 1081, 1084 or 8833 monitor to a colour TV.

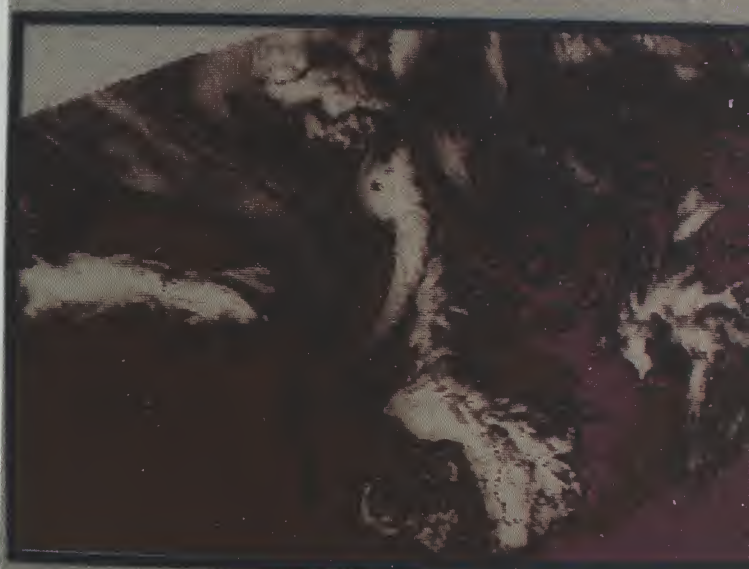
Price: £124.80 + VAT. Contact: Microtext, 7 Birdlip Close, Horndean, Portsmouth. Tel: (0705) 595694.

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TECHNOLOGICAL DEVELOPMENTS

Data supplied by the Met Office



METEOSAT Infra-Red 08/04/89 12:00

Users of 24-bit colour images scanned from Professional ScanLab will soon be able to insert them into Postscript colour separations generated in Professional Page. RESEP, a new utility from ASDG, is the program which makes it all possible.

RESEP is designed for use with a set-up of an Amiga 200 and Professional ScanLab with a Sharp JX-300 or JX-450 colour scanner, and software support from Professional Page. Images are saved using the Sharp scanner and Professional ScanLab in two forms: as a 4,096 colour HAMimage and as a 16,000,000 colour, 24-bit image. For composition and proofing purposes, the HAM version is used in conjunction with Professional Page.

Next, RESEP steps in and takes a 24-bit colour separation performed by Professional ScanLab, replacing the HAM separation in the PostScript file, going as far as to crop the image using information from the HAM version. Saved in Postscript format, the image is then ready to be turned to film for printing.

Contact: ASDG Incorporated, 925 Stewart Street, Madison, W1 53713, U.S.A. Tel: (608) 273 6585.



Turn Lefty's snarl into a smile ...

'There's only one way to save your life, brother,' snarled Lefty as he reached beneath his dark trench coat. The pool of light oozed from the street lamp and dripped off the edge of his fedora. The shadows from his too-stiff body extended into the night, swallowed by the misty background. Time stood still.

'Answer these questions, or it's curtains,' he grimaced. 'But if you have them right you get very very lucky plus the little matter of staying alive — at least till payday.'

1. How many programs are included in The Works, Platinum Edition?
2. How many entries does Thesauras have?
3. Which standards does the comms package emulate?
4. How many functions and colours are displayed in the database?
5. The Works operates united by a single interface. True or False?

'Digipro is gonna give ya the Works, plus a $\frac{1}{2}$ meg expansion,' Lefty snapped. 'But only if you get it right. Five runners up will walk off with a copy of Transcript, GoldDisk's latest baby,' he snarled. Or was that a smile? The light glanced off his platinum front tooth. I could see the shape of a Z88 under his coat, and shuddered.

'Save yourself from wearing a pair of custom cement shoes.' As he slunk into the shadows I could still hear the echo of that menacing whisper like the scraping of a nail on a rusty padlock. 'Put your answers on a postcard by September 15 and mail them to:'

*Digipro/The Works Competition
c/o Amiga User International
40 Bowling Green Lane
London EC1R 0NE*

'... And drive carefully. The life you save may be your own ...'

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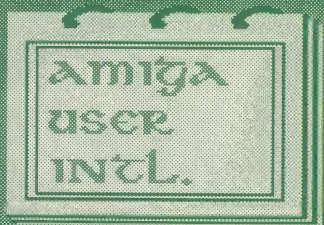
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